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| (54) Title: GENES AND GENE EXPRESSION PRODUCTS THAT ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER | | | |
| (57) Abstract This invention relates to novel human genes, to proteins expressed by the genes, and to variants of the proteins. The invention also relates to diagnostic and therapeutic agents related to the genes and proteins, including probes, antisense constructs, and antibodies. The invention further relates to polynucleotides differentially expressed in prostate cancer. | | | |

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GENES AND GENE EXPRESSION PRODUCTS THAT ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

FIELD OF THE INVENTION

This invention relates to the area of diagnosis, prognosis, and treatment
5 of cancer, tumor progression, hyperproliferative cell growth, and accompanying
physical and biological manifestations. More specifically, the invention includes
polynucleotides that are differentially regulated in prostatic disorders, such as metastatic
prostate cancer, localized prostate cancer, and benign prostate hyperplasia (BPH).

BACKGROUND OF THE INVENTION

10 Genes that are up- or down-regulated in cancer or tumor progression are
useful for therapeutic and diagnostic purposes. For example, detection of genes or gene
expression products up-regulated in hyperproliferative cells can be a predictive or
diagnostic marker of the onset or the progression of cancer. Early diagnosis can be
useful if the cancer, tumors, or hyperproliferating cells can be inhibited, removed, or
15 terminated to prevent metastasis or recurrence of cancerous growth. Such early warning
is of particular use to prostate cancer patients, where removal of the growth, tumor, or
cells is beneficial if the disease is confined to the prostate. There is a need in the art for
genes related to cancer and tumor progression.

SUMMARY OF THE INVENTION

20 The present invention provides methods and reagents for diagnosing
cancer, tumor progression, hyperproliferative cell growth, and accompanying biological
and physical manifestations. Reagents for such diagnostic kits include:

- (a) polynucleotides comprising a sequence capable of hybridizing to
one or more of SEQ ID NO:1-339 or complement thereof;
- 25 (b) polypeptides comprising the amino acid sequence encoded by
any one of SEQ ID NO:1-339; and
- (c) antibodies capable of binding polypeptides comprising the amino
acid sequence of (b).

The methods of diagnosis of the present invention include both nucleic acid assays and immunoassays.

In another embodiment, the present invention provides both compositions and methods for treating or ameliorating cancer, tumor progression, hyperproliferative cell growth, and accompanying biological and physical manifestations. The compositions for treatment or amelioration include:

- (a) polynucleotides comprising the sequence capable of hybridizing to one or more of the sequences shown in SEQ ID NO:1-339 and complement thereof, including antisense, ribozyme and gene therapy nucleic acid constructs;
- 10 (b) polypeptides comprising the amino acid sequence encoded by any one of SEQ ID NO:1-339; and
- (c) antibodies capable of binding polypeptides of polypeptides comprising the amino acid sequence (b).

Methods of treatment or amelioration include administering compositions of polynucleotides, polypeptides, antibodies, or combinations thereof and can be used

- (a) to inhibit translation and/or transcription;
 - (b) to inhibit biological activity;
 - (c) as a vaccine antigen; and
 - (d) as an immune system inducer.
- 20 Such compositions can be administered systemically or locally to the desired site.

In one embodiment, the present invention provides a composition comprising an isolated polynucleotide selected from the group consisting of

- (a) any one of SEQ ID NOs:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;
 - (b) a polynucleotide that encodes a variant of the polypeptide encoded by (a); and
 - (c) a polynucleotide encoding a protein expressed by a polynucleotide having the sequence of any one of the sequences of (a).
- 30

Preferably, the nucleic acid obtained from the biological material of part (b) above is genomic DNA or mRNA. The nucleic acid can also be cDNA complementary to the mRNA.

Another embodiment of the invention is the use of the isolated
5 polynucleotides or parts thereof as diagnostic probes or as primers.

In another embodiment, the present invention provides a composition comprising a polypeptide, wherein said polypeptide is selected from the group consisting of:

(a) a polypeptide encoded by any one of SEQ ID Nos:2, 5, 49, 50,
10 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;

(b) a polypeptide encoded by full-length mRNA or cDNA corresponding to any one of SEQ ID NO:1-339; and

15 (c) a variant of the protein (a) or (b);

In certain preferred embodiments, the polynucleotide is operably linked to an expression control sequence. The invention further provides a host cell, including bacterial, yeast, insect and mammalian cells, transformed with the polynucleotide sequence. The invention also provides the full-length cDNA and the full length human
20 gene corresponding to the polynucleotide.

Protein and polypeptide compositions of the invention may further comprise a pharmaceutically acceptable carrier. Compositions comprising an antibody that specifically reacts with such protein or polypeptide are also provided by the present invention.

25 The invention further relates to a polypeptide or nucleic acid obtained by transforming a host cell with nucleic acid comprising at least one of SEQ ID NO:1-339, culturing the host cell, and recovering the replicated nucleic acid, the expressed RNA, and/or the expressed polypeptide.

Brief Description of the Figures

30 Figure 1 provides the open reading frame for clone SL 195.

Figure 2 provides the open reading frame for clone SL 197.

Figure 3 provides the immunohistochemistry staining results for clone SL 5 expression in a variety of normal and tumor tissues.

Detailed Description of the Invention

Genes that are up- or down-regulated in cancer or tumor progression are useful for therapeutic and diagnostic purposes. For example, a diagnostic assay to determine the stage of the disease also is useful in tailoring treatment of aggressive versus more mild cancer or tumor progression. The polynucleotide sequences and encoded polypeptides of the present invention are useful for these diagnostic or prognostic purposes.

Further, modulation of genes or gene expression products that are mis-regulated can be used to treat or ameliorate cancer, tumor progression, hyperproliferative cell growth, and the accompanying physical and biological manifestations. For example, the polynucleotide sequences provided herein as SEQ ID NO:1-339, can be used to construct the following polynucleotide and polypeptide compositions that are useful for treatment: antisense; ribozymes; antibodies; vaccine antigens; and immune system inducers, to induce dendritic cells, for example.

Identified herein are polynucleotide sequences that are upregulated in a cancer cell line, more specifically in a prostate cancer cell line. Thus, the present invention relates to methods and reagents for diagnosis, and to methods and compositions for treatment.

I. Use of Polynucleotides Having a Sequence of One or More of SEQ ID NO:1-339 to Obtain Full-Length cDNA and Full-Length Human Gene and Promoter Region

Full-length cDNA molecules comprising the disclosed sequences are obtained as follows. The polynucleotide or a portion thereof comprising at least 12, 15, 18, or 20 nucleotides is used as a hybridization probe to detect hybridizing members of a cDNA library using probe design methods, cloning methods, and clone selection techniques as described in U.S. Patent No. 5,654,173, "Secreted Proteins and Polynucleotides Encoding Them," incorporated herein by reference. Libraries of cDNA are made from selected tissues, such as normal or tumor tissue, or from tissues of a

mammal treated with, for example, a pharmaceutical agent. Preferably, the tissue is the same as that used to generate the polynucleotides, as both the polynucleotides and the cDNA represent expressed genes. Most preferably, the cDNA library is made from the biological material described herein in the Examples. Alternatively, many cDNA
5 libraries are available commercially. (Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual*, 2nd Ed. (Cold Spring Harbor Press, Cold Spring Harbor, NY 1989).

Members of the library that are larger than the polynucleotide, and preferably that contain the whole sequence of the native message, are obtained. In order
10 to confirm that the entire cDNA has been obtained, RNA protection experiments are performed as follows. Hybridization of a full-length cDNA to an mRNA will protect the RNA from RNase degradation. If the cDNA is not full length, then the portions of the mRNA that are not hybridized will be subject to RNase degradation. This is assayed, as is known in the art, by changes in electrophoretic mobility on
15 polyacrylamide gels, or by detection of released monoribonucleotides. Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual*, 2nd Ed. (Cold Spring Harbor Press, Cold Spring Harbor, NY 1989). In order to obtain additional sequences 5' to the end of a partial cDNA, 5' RACE (PCR Protocols: A Guide to Methods and Applications (Academic Press, Inc. 1990)) is performed.

20 Genomic DNA is isolated using polynucleotides in a manner similar to the isolation of full-length cDNAs. Briefly, the polynucleotides, or portions thereof, are used as probes to libraries of genomic DNA. Preferably, the library is obtained from the cell type that was used to generate the polynucleotides, but this is not essential. Most preferably, the genomic DNA is obtained from the biological material described
25 herein in the Examples. Such libraries may be in vectors suitable for carrying large segments of a genome, such as P1 or YAC, as described in detail in Sambrook *et al.*, 9.4-9.30. In addition, genomic sequences can be isolated from human BAC libraries, which are commercially available from Research Genetics, Inc., Huntsville, Alabama, USA, for example. In order to obtain additional 5' or 3' sequences, chromosome
30 walking is performed, as described in Sambrook *et al.*, such that adjacent and

overlapping fragments of genomic DNA are isolated. These are mapped and pieced together, as is known in the art, using restriction digestion enzymes and DNA ligase.

Using the polynucleotides sequences of the invention, corresponding full length genes can be isolated using both classical and PCR methods to construct and
5 probe cDNA libraries. Using either method, Northern blots, preferably, are performed on a number of cell types to determine which cell lines express the gene of interest at the highest rate.

Classical methods of constructing cDNA libraries are taught in Sambrook *et al.*, *supra*. With these methods, cDNA can be produced from mRNA and
10 inserted into viral or expression vectors. Typically, libraries of mRNA comprising poly(A) tails can be produced with poly(T) primers. Similarly, cDNA libraries can be produced using the instant sequences as primers.

PCR methods are used to amplify the members of a cDNA library that comprise the desired insert. In this case, the desired insert will contain sequence from
15 the full length cDNA that corresponds to the instant ESTs. Such PCR methods include gene trapping and RACE methods. Gruber *et al.*, PCT WO 95/04745 and Gruber *et al.*, U.S. Pat. No. 5,500,356. Kits are commercially available to perform gene trapping experiments from, for example, Life Technologies, Gaithersburg, Maryland, USA. PCT Pub. No. WO 97/19110. (Apte and Siebert, *Biotechniques* 15:890-893, 1993; Edwards
20 *et al.*, *Nuc. Acids Res.* 19:5227-5232, 1991).

The promoter region of a gene generally is located 5' to the initiation site for RNA polymerase II, and can be obtained by performing 5' RACE using a primer from the coding region of the gene. Alternatively, the cDNA can be used as a probe for the genomic sequence, and the region 5' to the coding region is identified by "walking
25 up." If the gene is highly expressed or differentially expressed, the promoter from the gene may be of use in a regulatory construct for a heterologous gene.

Once the full-length cDNA or gene is obtained, DNA encoding variants can be prepared by site-directed mutagenesis, described in detail in Sambrook *et al.*, 15.3-15.63. The choice of codon or nucleotide to be replaced can be based on disclosure
30 herein on optional changes in amino acids to achieve altered protein structure and/or function.

As an alternative method to obtaining DNA or RNA from a biological material, nucleic acid comprising nucleotides having the sequence of one or more polynucleotides of the invention can be synthesized. Thus, the invention encompasses nucleic acid molecules ranging in length from 15 nucleotides (corresponding to at least 5 15 contiguous nucleotides of one of SEQ ID NO:1-339) up to a maximum length suitable for one or more biological manipulations, including replication and expression, of the nucleic acid molecule. The invention includes but is not limited to (a) nucleic acid having the size of a full gene, and comprising at least one of SEQ ID NO:1-339; (b) the nucleic acid of (a) also comprising at least one additional gene, operably linked 10 to permit expression of a fusion protein; (c) an expression vector comprising (a) or (b); (d) a plasmid comprising (a) or (b) ; and (e) a recombinant viral particle comprising (a) or (b).

The sequence of a nucleic acid comprising at least 15 contiguous nucleotides of at least any one of SEQ ID NO:1-339, preferably the entire sequence of 15 at least any one of SEQ ID NO:1-339, is not limited and can be any sequence of A, T, G, and/or C (for DNA) and A, U, G, and/or C (for RNA) or modified bases thereof, including inosine and pseudouridine. The choice of sequence will depend on the desired function and can be dictated by coding regions desired, the intron-like regions desired, and the regulatory regions desired.

20 Where the entire sequence of any one of SEQ ID NO:1-339 is within the nucleic acid, the nucleic acid obtained is referred to herein as a polynucleotide comprising the sequence of any one of SEQ ID NO:1-339.

II. Expression of Polypeptide Encoded by Full-Length cDNA or Full-Length Gene

The polynucleotide, the corresponding cDNA, or the full-length gene is 25 used to express the partial or complete gene product. Appropriate polynucleotide constructs are purified using standard recombinant DNA techniques as described in, for example, Sambrook *et al.*, (1989) *Molecular Cloning: A Laboratory Manual*, 2nd ed. (Cold Spring Harbor Press, Cold Spring Harbor, New York). The polypeptides encoded by the polynucleotides are expressed in any expression system, including, for example,

bacterial, yeast, insect, amphibian and mammalian systems. Suitable vectors and host cells are described in U.S. Patent No. 5,654,173.

Bacteria. Expression systems in bacteria include those described in Chang *et al.*, *Nature* (1978) 275:615, Goeddel *et al.*, *Nature* (1979) 281:544, Goeddel *et al.*, *Nucleic Acids Res.* (1980) 8:4057; EP 0 036,776, U.S. Patent No. 4,551,433, DeBoer *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1983) 80:21-25, and Siebenlist *et al.*, *Cell* (1980) 20:269.

Yeast. Expression systems in yeast include those described in Hinnen *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1978) 75:1929; Ito *et al.*, *J. Bacteriol.* (1983) 153:163; Kurtz *et al.*, *Mol. Cell. Biol.* (1986) 6:142; Kunze *et al.*, *J. Basic Microbiol.* (1985) 25:141; Gleeson *et al.*, *J. Gen. Microbiol.* (1986) 132:3459, Roggenkamp *et al.*, *Mol. Gen. Genet.* (1986) 202:302; Das *et al.*, *J. Bacteriol.* (1984) 158:1165; De Louvencourt *et al.*, *J. Bacteriol.* (1983) 154:737, Van den Berg *et al.*, *Bio/Technology* (1990) 8:135; Kunze *et al.*, *J. Basic Microbiol.* (1985) 25:141; Cregg *et al.*, *Mol. Cell. Biol.* (1985) 5:3376, U.S. Patent Nos. 4,837,148 and 4,929,555; Beach and Nurse, *Nature* (1981) 300:706; Davidow *et al.*, *Curr. Genet.* (1985) 10:380, Gaillardin *et al.*, *Curr. Genet.* (1985) 10:49, Ballance *et al.*, *Biochem. Biophys. Res. Commun.* (1983) 112:284-289; Tilburn *et al.*, *Gene* (1983) 26:205-221, Yelton *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1984) 81:1470-1474, Kelly and Hynes, *EMBO J.* (1985) 4:475479; EP 0 244,234, and WO 91/00357.

Insect Cells. Expression of heterologous genes in insects is accomplished as described in U.S. Patent No. 4,745,051, Friesen *et al.* (1986) "The Regulation of Baculovirus Gene Expression" in: *The Molecular Biology Of Baculoviruses* (W. Doerfler, ed.), EP 0 127,839, EP 0 155,476, and Vlak *et al.*, *J. Gen. Virol.* (1988) 69:765-776, Miller *et al.*, *Ann. Rev. Microbiol.* (1988) 42:177, Carbonell *et al.*, *Gene* (1988) 73:409, Maeda *et al.*, *Nature* (1985) 315:592-594, Lebacqz-Verheyden *et al.*, *Mol. Cell. Biol.* (1988) 8:3129; Smith *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1985) 82:8404, Miyajima *et al.*, *Gene* (1987) 58:273; and Martin *et al.*, *DNA* (1988) 7:99. Numerous baculoviral strains and variants and corresponding permissive insect host cells from hosts are described in Luckow *et al.*, *Bio/Technology*

(1988) 6:47-55, Miller *et al.*, Generic Engineering (Setlow, J.K. *et al.* eds.). Vol. 8 (Plenum Publishing, 1986), pp. 277-279, and Maeda *et al.*, *Nature*, (1985) 315:592-594.

Mammalian Cells. Mammalian expression is accomplished as described in Dijkema *et al.*, *EMBO J.* (1985) 4:761, Gorman *et al.*, *Proc. Natl. Acad. Sci. (USA)* 5 (1982) 79:6777, Boshart *et al.*, *Cell* (1985) 41:521 and U.S. Patent No. 4,399,216. Other features of mammalian expression are facilitated as described in Ham and Wallace. *Meth. Enz.* (1979) 58:44, Barnes and Sato. *Anal. Biochem.* (1980) 102:255, U.S. Patent Nos. 4,767,704, 4,657,866, 4,927,762, 4,560,655, WO 90/103430, WO 87/00195, and U.S. RE 30,985.

10 Polynucleotide molecules comprising the polynucleotide sequence are propagated by placing the molecule in a vector. Viral and non-viral vectors are used, including plasmids. The choice of plasmid will depend on the type of cell in which propagation is desired and the purpose of propagation. Certain vectors are useful for amplifying and making large amounts of the desired DNA sequence. Other vectors are
15 suitable for expression in cells in culture. Still other vectors are suitable for transfer and expression in cells in a whole animal or person. The choice of appropriate vector is well within the skill of the art. Many such vectors are available commercially. The polynucleotide is inserted into a vector typically by means of DNA ligase attachment to a cleaved restriction enzyme site in the vector. Alternatively, the desired nucleotide
20 sequence may be inserted by homologous recombination in vivo. Typically this is accomplished by attaching regions of homology to the vector on the flanks of the desired nucleotide sequence. Regions of homology are added by ligation of oligonucleotides, or by polymerase chain reaction using primers comprising both the region of homology and a portion of the desired nucleotide sequence, for example.

25 Polynucleotides are linked to regulatory sequences as appropriate to obtain the desired expression properties. These may include promoters (attached either at the 5' end of the sense strand or at the 3' end of the antisense strand), enhancers, terminators, operators, repressors, and inducers. The promoters may be regulated or constitutive. In some situations it may be desirable to use conditionally active
30 promoters, such as tissue-specific or developmental stage-specific promoters. These are

linked to the desired nucleotide sequence using the techniques described above for linkage to vectors. Any techniques known in the art may be used.

When any of the above host cells, or other appropriate host cells or organisms, are used to replicate and/or express the polynucleotides or nucleic acids of the invention, the resulting replicated nucleic acid, RNA, expressed protein or polypeptide, is within the scope of the invention as a product of the host cell or organism. The product is recovered by any appropriate means known in the art.

Once the gene corresponding to the polypeptide is identified, its expression can be regulated in the cell to which the gene is native. For example, an endogenous gene of a cell can be regulated by an exogenous regulatory sequence as disclosed in U.S. Patent No. 5,641,670, "Protein Production and Protein Delivery."

Ribozymes

Trans-cleaving catalytic RNAs (ribozymes) are RNA molecules possessing endoribonuclease activity. Ribozymes are specifically designed for a particular target, and the target message must contain a specific nucleotide sequence. They are engineered to cleave any RNA species site-specifically in the background of cellular RNA. The cleavage event renders the mRNA unstable and prevents protein expression. Importantly, ribozymes can be used to inhibit expression of a gene of unknown function for the purpose of determining its function in an in vitro or in vivo context, by detecting the phenotypic effect.

One commonly used ribozyme motif is the hammerhead, for which the substrate sequence requirements are minimal. Design of the hammerhead ribozyme is disclosed in Usman *et al.*, *Current Opin. Struct. Biol.* (1996) 6:527-533. Usman also discusses the therapeutic uses of ribozymes. Ribozymes can also be prepared and used as described in Long *et al.*, *FASEB J.* (1993) 7:25; Symons, *Ann. Rev. Biochem.* (1992) 61:641; Perrotta *et al.*, *Biochem.* (1992) 31:16-17; Ojwang *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1992) 89:10802-10806; and U.S. Patent No. 5,254,678. Ribozyme cleavage of HIV-I RNA is described in U.S. Patent No. 5,144,019; methods of cleaving RNA using ribozymes is described in U.S. Patent No. 5,116,742; and methods for increasing the specificity of ribozymes are described in U.S. Patent No. 5,225,337 and Koizumi *et al.*,

Nucleic Acid Res. (1989) 17:7059-7071. Preparation and use of ribozyme fragments in a hammerhead structure are also described by Koizumi *et al.*, *Nucleic Acids Res.* (1989) 17:7059-7071. Preparation and use of ribozyme fragments in a hairpin structure are described by Chowrira and Burke, *Nucleic Acids Res.* (1992) 20:2835. Ribozymes can
5 also be made by rolling transcription as described in Daubendiek and Kool, *Nat. Biotechnol.* (1997) 15(3):273-277.

The hybridizing region of the ribozyme may be modified or may be prepared as a branched structure as described in Horn and Urdea, *Nucleic Acids Res.* (1989) 17:6959-67. The basic structure of the ribozymes may also be chemically
10 altered in ways familiar to those skilled in the art, and chemically synthesized ribozymes can be administered as synthetic oligonucleotide derivatives modified by monomeric units. In a therapeutic context, liposome mediated delivery of ribozymes improves cellular uptake, as described in Birikh *et al.*, *Eur. J. Biochem.* (1997) 245:1-16.

15 Therapeutic and functional genomic applications of ribozymes proceed beginning with knowledge of a portion of the coding sequence of the gene to be inhibited. Thus, for many genes, a polynucleotide sequence as disclosed herein provides adequate sequence for constructing an effective ribozyme. A target cleavage site is selected in the target sequence, and a ribozyme is constructed based on the 5' and
20 3' nucleotide sequences that flank the cleavage site. Retroviral vectors are engineered to express monomeric and multimeric hammerhead ribozymes targeting the mRNA of the target coding sequence. These monomeric and multimeric ribozymes are tested in vitro for an ability to cleave the target mRNA. A cell line is stably transduced with the retroviral vectors expressing the ribozymes, and the transduction is confirmed by
25 Northern blot analysis and reverse-transcription polymerase chain reaction (RT-PCR). The cells are screened for inactivation of the target mRNA by such indicators as reduction of expression of disease markers or reduction of the gene product of the target mRNA.

Antisense

Antisense nucleic acids are designed to specifically bind to RNA, resulting in the formation of RNA-DNA or RNA-RNA hybrids, with an arrest of DNA replication, reverse transcription or messenger RNA translation. Antisense polynucleotides based on a selected sequence can interfere with expression of the corresponding gene. Antisense polynucleotides are typically generated within the cell by expression from antisense constructs that contain the antisense EST strand as the transcribed strand. Antisense polynucleotides will bind and/or interfere with the translation of the corresponding mRNA. The expression products of control cells and cells treated with the antisense construct are compared to detect the protein product of the gene corresponding to the polynucleotide. The protein is isolated and identified using routine biochemical methods.

Antisense therapy for a variety of cancers is in clinical phase and has been discussed extensively in the literature. Reed reviewed antisense therapy directed at the Bcl-2 gene in tumors; gene transfer-mediated overexpression of Bcl-2 in tumor cell lines conferred resistance to many types of cancer drugs. (Reed, J.C., *N.C.I.* (1997) 89:988-990). The potential for clinical development of antisense inhibitors of *ras* is discussed by Cowser, L.M., *Anti-Cancer Drug Design* (1997) 12:359-371. Additional important antisense targets include leukemia (Geurtz, A.M., *Anti-Cancer Drug Design* (1997) 12:341-358); human C-ref kinase (Monia, B.P., *Anti-Cancer Drug Design* (1997) 12:327-339); and protein kinase C (McGraw *et al.*, *Anti-Cancer Drug Design* (1997) 12:315-326).

Given the extensive background literature and clinical experience in antisense therapy, one skilled in the art can use selected polynucleotides of the invention as additional potential therapeutics. The choice of polynucleotide can be narrowed by first testing them for binding to "hot spot" regions of the genome of cancerous cells. If a polynucleotide is identified as binding to a "hot spot", testing the polynucleotide as an antisense compound in the corresponding cancer cells clearly is warranted.

Ogunbiyi *et al.*, *Gastroenterology* (1997) 113(3):761-766 describe prognostic use of allelic loss in colon cancer; Barks *et al.*, *Genes, Chromosomes, and*

Cancer (1997) 19(4):278-285 describe increased chromosome copy number detected by FISH in malignant melanoma; Nishizake *et al.*, *Genes, Chromosomes, and Cancer* (1997) 19(4):267-272 describe genetic alterations in primary breast cancer and their metastases and direct comparison using modified comparative genome hybridization; 5 and Elo *et al.*, *Cancer Research* (1997) 57(16):3356-3359 disclose that loss of heterozygosity at 16z24.1-q24.2 is significantly associated with metastatic and aggressive behavior of prostate cancer.

Dominant Negative Mutations

Dominant negative mutations are readily generated for corresponding 10 proteins that are active as homomultimers. A mutant polypeptide will interact with wild-type polypeptides (made from the other allele) and form a non-functional multimer. Thus, a mutation is in a substrate-binding domain, a catalytic domain, or a cellular localization domain. Preferably, the mutant polypeptide will be overproduced. Point mutations are made that have such an effect. In addition, fusion of different 15 polypeptides of various lengths to the terminus of a protein can yield dominant negative mutants. General strategies are available for making dominant negative mutants. See Herskowitz, *Nature* (1987) 329:219-222. Such a technique can be used for creating a loss of function mutation, which is useful for determining the function of a protein.

Identification of Secreted and Membrane-Bound Polypeptides

20 Both secreted and membrane-bound polypeptides of the present invention are of interest. For example, levels of secreted polypeptides can be assayed conveniently in body fluids, such as blood, urine, prostatic fluid and semen. Membrane-bound polypeptides are useful for constructing vaccine antigens or inducing an immune response. Such antigens would comprise all or part of the extracellular 25 region of the membrane-bound polypeptides.

Because both secreted and membrane-bound polypeptides comprise a fragment of contiguous hydrophobic amino acids, hydrophobicity predicting algorithms can be used to identify such polypeptides.

A signal sequence is usually encoded by both secreted and membrane- 30 bound polypeptide genes to direct a polypeptide to the surface of the cell. The signal

sequence usually comprises a stretch of hydrophobic residues. Such signal sequences can fold into helical structures.

Membrane-bound polypeptides typically comprise at least one transmembrane region that possesses a stretch of hydrophobic amino acids that can
5 transverse the membrane. Some transmembrane regions also exhibit a helical structure.

Hydrophobic fragments within a polypeptide can be identified by using computer algorithms. Such algorithms include Hopp & Woods, Proc. Natl. Acad. Sci. USA 78: 3824-3828 (1981); Kyte & Doolittle, J. Mol. Biol. 157: 105-132 (1982); and RAOAR algorithm, Degli Esposti *et al.*, Eur. J. Biochem. 190: 207-219 (1990).

10 Another method of identifying secreted and membrane-bound polypeptides is to translate the present polynucleotides, SEQ ID NO:1-339, in all six frames and determine if at least 8 contiguous hydrophobic amino acids are present. Those translated polypeptides with at least 8; more typically, 10; even more typically, 12 contiguous hydrophobic amino acids are considered to be either a putative secreted
15 or membrane bound polypeptide. Hydrophobic amino acids include alanine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, threonine, tryptophan, tyrosine, and valine.

Putative secreted and/or membrane-bound polypeptides are encoded by the sequences of the following clones: SL-5, SL-6, SL-9, SL-11, SL-13, SL-90, SL-
20 100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, and SL-177.

Construction of Polypeptides of the Invention and Variants Thereof

The polypeptides of the invention include those encoded by the disclosed polynucleotides. These polypeptides can also be encoded by nucleic acids that, by virtue of the degeneracy of the genetic code, are not identical in sequence to the
25 disclosed polynucleotides. Thus, the invention includes within its scope nucleic acids comprising polynucleotides encoding a protein or polypeptide expressed by a polynucleotide having the sequence of any one of SEQ ID NO:1-339. Also within the scope of the invention are variants; variants of polypeptides include mutants, fragments, and fusions. Mutants can include amino acid substitutions, additions or deletions. The
30 amino acid substitutions can be conservative amino acid substitutions or substitutions to

eliminate non-essential amino acids, such as to alter a glycosylation site, a phosphorylation site or an acetylation site, or to minimize misfolding by substitution or deletion of one or more cysteine residues that are not necessary for function. Conservative amino acid substitutions are those that preserve the general charge, hydrophobicity/hydrophilicity, and/or steric bulk of the amino acid substituted. For example, substitutions between the following groups are conservative: Gly/Ala, Val/Ile/Leu, Asp/Glu, Lys/Arg, Asn/Gln, Ser/Cys, Thr, and Phe/Trp/Tyr.

Cysteine-depleted muteins are variants within the scope of the invention. These variants can be constructed according to methods disclosed in U.S. Patent No. 4,959,314, "Cysteine-Depleted Muteins of Biologically Active Proteins." The patent discloses how to substitute other amino acids for cysteines, and how to determine biological activity and effect of the substitution. Such methods are suitable for proteins according to this invention that have cysteine residues suitable for such substitutions, for example to eliminate disulfide bond formation.

The protein variants described herein are encoded by polynucleotides that are within the scope of the invention. The genetic code can be used to select the appropriate codons to construct the corresponding variants.

The invention encompasses polynucleotide sequences having at least 65% sequence identity to any one of SEQ ID NOs:1-339 as determined by the Smith-Waterman homology search algorithm as implemented in MSPRCH program (Oxford Molecular) using an affine gap search with the following search parameters: gap open penalty of 12, and gap extension penalty of 1.

Use of the Polynucleotides as Probes, in Mapping, and in Tissue Profiling

Probes

Polynucleotide probes comprising at least 12 contiguous nucleotides selected from the nucleotide sequence of a polynucleotide of SEQ ID NO:1-339 are used for a variety of purposes, including identification of human chromosomes and determining transcription levels.

The nucleotide probes are labeled, for example, with a radioactive, fluorescent, biotinylated, or chemiluminescent label, and detected by well known

methods appropriate for the particular label selected. Protocols for hybridizing nucleotide probes to preparations of metaphase chromosomes are also well known in the art. A nucleotide probe will hybridize specifically to nucleotide sequences in the chromosome preparations which are complementary to the nucleotide sequence of the probe. A probe that hybridizes specifically to a polynucleotide should provide a detection signal at least 5-, 10-, or 20-fold higher than the background hybridization provided with other unrelated sequences.

In a non-limiting example, commercial programs are available for identifying regions of chromosomes commonly associated with disease, such as cancer. Polynucleotides of the invention can be used to probe these regions. For example, if through profile searching a polynucleotide is identified as corresponding to a gene encoding a kinase, its ability to bind to a cancer-related chromosomal region will suggest its role as a kinase in one or more stages of tumor cell development/growth. Although some experimentation would be required to elucidate the role, the polynucleotide constitutes a new material for isolating a specific protein that has potential for developing a cancer diagnostic or therapeutic.

Nucleotide probes are used to detect expression of a gene corresponding to the polynucleotide. For example, in Northern blots, mRNA is separated electrophoretically and contacted with a probe. A probe is detected as hybridizing to an mRNA species of a particular size. The amount of hybridization is quantitated to determine relative amounts of expression, for example under a particular condition. Probes are also used to detect products of amplification by polymerase chain reaction. The products of the reaction are hybridized to the probe and hybrids are detected. Probes are used for in situ hybridization to cells to detect expression. Probes can also be used in vivo for diagnostic detection of hybridizing sequences. Probes are typically labeled with a radioactive isotope. Other types of detectable labels may be used such as chromophores, fluors, and enzymes.

Expression of specific mRNA can vary in different cell types and can be tissue specific. This variation of mRNA levels in different cell types can be exploited with nucleic acid probe assays to determine tissue types. For example, PCR, branched DNA probe assays, or blotting techniques utilizing nucleic acid probes substantially

identical or complementary to polynucleotides listed in the Sequence Listing can determine the presence or absence of cDNA or mRNA related to the polynucleotides of the invention.

Examples of a nucleotide hybridization assay are described in Urdea *et al.*, PCT WO92/02526 and Urdea *et al.*, U.S. Patent No. 5,124,246, both incorporated
5 herein by reference. The references describe an example of a sandwich nucleotide hybridization assay.

Alternatively, the Polymerase Chain Reaction (PCR) is another means for detecting small amounts of target nucleic acids, as described in Mullis *et al.*, *Meth. Enzymol.* (1987) 155:335-350; U.S. Patent No. 4,683,195; and U.S. Patent No. 4,683,202, all incorporated herein by reference. Two primer polynucleotides
10 nucleotides hybridize with the target nucleic acids and are used to prime the reaction. The primers may be composed of sequence within or 3' and 5' to the polynucleotides of the Sequence Listing. Alternatively, if the primers are 3' and 5' to these polynucleotides,
15 they need not hybridize to them or the complements. A thermostable polymerase creates copies of target nucleic acids from the primers using the original target nucleic acids as a template. After a large amount of target nucleic acids is generated by the polymerase, it is detected by methods such as Southern blots. When using the Southern blot method, the labeled probe will hybridize to a polynucleotide of the Sequence
20 Listing or complement.

Furthermore, mRNA or cDNA can be detected by traditional blotting techniques described in Sambrook *et al.*, "Molecular Cloning: A Laboratory Manual" (New York, Cold Spring Harbor Laboratory, 1989). mRNA or cDNA generated from
25 mRNA using a polymerase enzyme can be purified and separated using gel electrophoresis. The nucleic acids on the gel are then blotted onto a solid support, such as nitrocellulose. The solid support is exposed to a labeled probe and then washed to remove any unhybridized probe. Next, the duplexes containing the labeled probe are detected. Typically, the probe is labeled with radioactivity.

Mapping

Polynucleotides of the present invention are used to identify a chromosome on which the corresponding gene resides. Using fluorescence in situ hybridization (FISH) on normal metaphase spreads, comparative genomic hybridization
5 allows total genome assessment of changes in relative copy number of DNA sequences. See Schwartz and Samad, *Current Opinions in Biotechnology* (1994) 8:70-74; Kallioniemi *et al.*, *Seminars in Cancer Biology* (1993) 4:41-46; Valdes and Tagle, *Methods in Molecular Biology* (1997) 68:1, Boultonwood, ed., Human Press, Totowa, NJ.

Preparations of human metaphase chromosomes are prepared using
10 standard cytogenetic techniques from human primary tissues or cell lines. Nucleotide probes comprising at least 12 contiguous nucleotides selected from the nucleotide sequence shown in the Sequence Listing are used to identify the corresponding chromosome. The nucleotide probes are labeled, for example, with a radioactive, fluorescent, biotinylated, or chemiluminescent label, and detected by well known
15 methods appropriate for the particular label selected. Protocols for hybridizing nucleotide probes to preparations of metaphase chromosomes are also well known in the art. A nucleotide probe will hybridize specifically to nucleotide sequences in the chromosome preparations that are complementary to the nucleotide sequence of the probe. A probe that hybridizes specifically to a polynucleotide-related gene provides a
20 detection signal at least 5-, 10-, or 20-fold higher than the background hybridization provided with non-EST coding sequences.

Polynucleotides are mapped to particular chromosomes using, for example, radiation hybrids or chromosome-specific hybrid panels. See Leach *et al.*, *Advances in Genetics*, (1995) 33:63-99; Walter *et al.*, *Nature Genetics* (1994) 7:22-28;
25 Walter and Goodfellow, *Trends in Genetics* (1992) 9:352. Such mapping can be useful in identifying the function of the polynucleotide-related gene by its proximity to other genes with known function. Function can also be assigned to the related gene when particular syndromes or diseases map to the same chromosome.

Tissue Profiling

30 The polynucleotides of the present invention can be used to determine the tissue type from which a given sample is derived. For example, a metastatic lesion

is identified by its developmental organ or tissue source by identifying the expression of a particular marker of that organ or tissue. If a polynucleotide is expressed only in a specific tissue type, and a metastatic lesion is found to express that polynucleotide, then the developmental source of the lesion has been identified. Expression of a particular
5 polynucleotide is assayed by detection of either the corresponding mRNA or the protein product. Immunological methods, such as antibody staining, are used to detect a particular protein product. Hybridization methods may be used to detect particular mRNA species, including but not limited to in situ hybridization and Northern blotting.

Use of Polymorphisms

10 A polynucleotide will be useful in forensics, genetic analysis, mapping, and diagnostic applications if the corresponding region of a gene is polymorphic in the human population. A particular polymorphic form of the polynucleotide may be used to either identify a sample as deriving from a suspect or rule out the possibility that the sample derives from the suspect. Any means for detecting a polymorphism in a gene
15 are used, including but not limited to electrophoresis of protein polymorphic variants, differential sensitivity to restriction enzyme cleavage, and hybridization to an allele-specific probe.

Use of Polynucleotides to Raise Antibodies

Expression products of a polynucleotide, the corresponding mRNA or
20 cDNA, or the corresponding complete gene are prepared and used for raising antibodies for experimental, diagnostic, and therapeutic purposes. The polynucleotide or related cDNA is expressed as described above, and antibodies are prepared. These antibodies are specific to an epitope on the polynucleotide-encoded polypeptide, and can precipitate or bind to the corresponding native protein in a cell or tissue preparation or
25 in a cell-free extract of an in vitro expression system.

Immunogens for raising antibodies are prepared by mixing the polypeptides encoded by the polynucleotide of the present invention with adjuvants. Alternatively, polypeptides are made as fusion proteins to larger immunogenic proteins. Polypeptides are also covalently linked to other larger immunogenic proteins, such as
30 keyhole limpet hemocyanin. Immunogens are typically administered intradermally.

subcutaneously, or intramuscularly. Immunogens are administered to experimental animals such as rabbits, sheep, and mice, to generate antibodies. Optionally, the animal spleen cells are isolated and fused with myeloma cells to form hybridomas which secrete monoclonal antibodies. Such methods are well known in the art. According to
5 another method known in the art, the polynucleotide is administered directly, such as by intramuscular injection, and expressed in vivo. The expressed protein generates a variety of protein-specific immune responses, including production of antibodies, comparable to administration of the protein.

Preparations of polyclonal and monoclonal antibodies specific for
10 polynucleotide-encoded proteins and polypeptides are made using standard methods known in the art. The antibodies specifically bind to epitopes present in the polypeptides encoded by polynucleotides disclosed in the Sequence Listing. Typically, at least 6, 8, 10, or 12 contiguous amino acids are required to form an epitope. However, epitopes which involve non-contiguous amino acids may require more, for
15 example at least 15, 25, or 50 amino acids. A short sequence of a polynucleotide may then be unsuitable for use as an epitope to raise antibodies for identifying the corresponding novel protein, because of the potential for cross-reactivity with a known protein. However, the antibodies may be useful for other purposes, particularly if they identify common structural features of a known protein and a novel polypeptide
20 encoded by a polynucleotide of the invention.

Antibodies that specifically bind to human polynucleotide-encoded polypeptides should provide a detection signal at least 5-, 10-, or 20-fold higher than a detection signal provided with other proteins when used in Western blots or other immunochemical assays. Preferably, antibodies that specifically bind polypeptides do
25 not detect other proteins in immunochemical assays and can immunoprecipitate EST-encoded proteins from solution. For such immunoassays, any type of samples can be used, including tissue, organs, cells, urine, blood, prostatic fluid or semen.

Of interest are antibodies to the secreted polypeptides encoded by the present polynucleotide sequences, SEQ ID NO:1-339. Antibodies to secreted
30 polypeptides can be used to test body fluids, such as blood, urine, prostatic fluid and semen.

To test for the presence of serum antibodies to the polypeptide in a human population, human antibodies are purified by methods well known in the art. Preferably, the antibodies are affinity purified by passing antiserum over a column to which a protein, polypeptide, or fusion protein is bound. The bound antibodies can then
5 be eluted from the column, for example using a buffer with a high salt concentration.

In addition to the antibodies discussed above, genetically engineered antibody derivatives are made, such as single chain antibodies or humanized antibodies.

Antibodies to the polypeptides encoded by one or more of SEQ ID NO:1-339 also are contemplated for therapeutic compositions and uses. For example,
10 antibodies directed to membrane-bound polypeptides that are up-regulated in cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations can be constructed. Antibodies can provide a useful therapeutic in inhibiting cell growth or inducing an immune reaction to cancer, tumor, or hyperproliferating cells. Typically, such antibodies are directed the extracellular
15 regions of the membrane-bound polypeptide. The borders of such regions can be determined by identifying the location of the hydrophobic transmembrane fragment(s) in the encoded polypeptides of the present invention.

Exemplary antibodies were prepared using two sequences from clone SL-5: $\text{H}_2\text{N-CGPRLPSFPCPTHEPSTGQLSK-CONH}_2$ and $\text{H}_2\text{N-CKDSQGLSDFKR-NSRTTRRSYKCCONH}_2$. Using polyclonal antibodies raised against a mixture of
20 these polypeptides, immunohistochemistry was performed on a variety of tumor tissues and corresponding normal tissue. The results are shown in Figure 3, and discussed in the Examples. These polypeptides are useful for detecting a higher level of expression of clone SL-5 in tumor tissues.

25 Use of Polynucleotides to Construct Arrays for Diagnostics

The present polynucleotide sequences and gene products are useful for determining the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations. Specifically, the polynucleotides and encoded polypeptides of the instant invention can be utilized to

determine the occurrence of prostatic disorders, such as BPH or localized prostate cancer.

A number of prostatic disorders exist, including adenocarcinoma, BPH, histologic prostate cancer, prostatic intraepithelial neoplasia, clinical prostate cancer, 5 incidental prostate cancer, and localized prostate cancer. BPH is a common prostatic disorder in men which becomes clinically manifest usually after age fifty. In BPH, hyperplastic growth of prostatic cells in the periurethral glandular tissue in the central zone of the prostate gland cause an enlarged prostate which can compress or elongate the urethra and produce symptoms of urethral obstruction that may progress to urinary 10 retention or to a constellation of symptoms known as prostatism. A host of physical manifestations can accompany prostatic disorders including: impotency, reduced urinary flow, hesitancy in initiating voiding, postvoid dribbling, a sensation of incomplete bladder emptying, and development of bladder or high urinary tract infections.

15 To determine the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations, the levels of polynucleotides and/or encoded polypeptides of the present invention in a sample are compared to the levels in a normal control of body tissues, cells, organs, or fluids. The normal control can include a pool of cells from a particular organ or tissue 20 or tissues and/or cells from throughout the body. Either the immunoassays described above or the nucleic acid assays described below can be used for such measurements.

Any observed difference between the sample and normal control can indicate the occurrence of disease or disorder. Typically, if the levels of the polynucleotides and the encoded polypeptides of the present invention are higher than 25 those found in the normal control, the results indicate the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations.

In addition, the present polynucleotides can be useful to diagnose the severity as well as the occurrence of cancer, tumor progression, hyperproliferative 30 growth, and/or accompanying biological or physical manifestations, including prostatic disorders. For example, the greater the difference observed in the sample versus the

normal control of the present polynucleotides or encoded polypeptides, the greater the severity of the disorder, in particular, when higher levels as compared to a normal control are observed.

The present polynucleotides, as shown in SEQ ID NO:1-339, were
5 expressed at higher levels in a prostate cancer cell line versus a normal prostate epithelial cell line.

Polynucleotide arrays provide a high throughput technique that can assay a large number of polynucleotide sequences in a sample. This technology can be used as a diagnostic and as a tool to test for differential expression to determine function of
10 an encoded protein.

To create arrays, polynucleotide probes are spotted onto a substrate in a two-dimensional matrix or array. Samples of polynucleotides can be labeled and then hybridized to the probes. Double stranded polynucleotides, comprising the labeled sample polynucleotides bound to probe polynucleotides, can be detected once the
15 unbound portion of the sample is washed away.

The probe polynucleotides can be spotted on substrates including glass, nitrocellulose, etc. The probes can be bound to the substrate by either covalent bonds or by non-specific interactions, such as hydrophobic interactions. The sample polynucleotides can be labeled using radioactive labels, fluorophors, etc.

20 Techniques for constructing arrays and methods of using these arrays are described in EP No. 0 799 897; PCT No. WO 97/29212; PCT No. WO 97/27317; EP No. 0 785 280; PCT No. WO 97/02357; U.S. Pat. No. 5,593,839; U.S. Pat. No. 5,578,832; EP No. 0 728 520; U.S. Pat. No. 5,599,695; EP No. 0 721 016; U.S. Pat. No. 5,556,752; PCT No. WO 95/22058; and U.S. Pat. No. 5,631,734.

25 Further, arrays can be used to examine differential expression of genes and can be used to determine gene function. For example, arrays of the instant polynucleotide sequences can be used to determine if any of the EST sequences are differentially expressed between normal cells and cancer cells. for example. High expression of a particular message in a cancer cell, which is not observed in a
30 corresponding normal cell, can indicate a cancer specific protein.

Differential Expression

The present invention also provides a method to identify abnormal or diseased tissue in a human. For polynucleotides corresponding to profiles of protein families as described above, the choice of tissue may be dictated by the putative biological function. The expression of a gene corresponding to a specific polynucleotide is compared between a first tissue that is suspected of being diseased and a second, normal tissue of the human. The normal tissue is any tissue of the human, especially those that express the polynucleotide-related gene including, but not limited to, brain, thymus, testis, heart, prostate, placenta, spleen, small intestine, skeletal muscle, pancreas, and the mucosal lining of the colon.

The polynucleotide-related genes in the two tissues are compared by any means known in the art. For example, the two genes are sequenced, and the sequence of the gene in the tissue suspected of being diseased is compared with the gene sequence in the normal tissue. The polynucleotide-related genes, or portions thereof, in the two tissues are amplified, for example using nucleotide primers based on the nucleotide sequence shown in the Sequence Listing, using the polymerase chain reaction. The amplified genes or portions of genes are hybridized to nucleotide probes selected from the same nucleotide sequence shown in the Sequence Listing. A difference in the nucleotide sequence of the polynucleotide-related gene in the tissue suspected of being diseased compared with the normal nucleotide sequence suggests a role of the polynucleotide-encoded proteins in the disease, and provides a lead for preparing a therapeutic agent. The nucleotide probes are labeled by a variety of methods, such as radiolabeling, biotinylation, or labeling with fluorescent or chemiluminescent tags, and detected by standard methods known in the art.

Alternatively, polynucleotide-related mRNA in the two tissues is compared. PolyA⁺ RNA is isolated from the two tissues as is known in the art. For example, one of skill in the art can readily determine differences in the size or amount of polynucleotide-related mRNA transcripts between the two tissues using Northern blots and nucleotide probes selected from the nucleotide sequence shown in the Sequence Listing. Increased or decreased expression of an polynucleotide-related mRNA in a tissue sample suspected of being diseased, compared with the expression of

the same polynucleotide-related mRNA in a normal tissue, suggests that the expressed protein has a role in the disease, and also provides a lead for preparing a therapeutic agent.

Any method for analyzing proteins is used to compare two polynucleotide-encoded proteins from matched samples. The sizes of the proteins in the two tissues are compared, for example, using antibodies of the present invention to detect polynucleotide-encoded proteins in Western blots of protein extracts from the two tissues. Other changes, such as expression levels and subcellular localization, can also be detected immunologically, using antibodies to the corresponding protein. A higher or lower level of polynucleotide-encoded protein expression in a tissue suspected of being diseased, compared with the same polynucleotide-encoded protein expression level in a normal tissue, is indicative that the expressed protein has a role in the disease, and provides another lead for preparing a therapeutic agent.

Similarly, comparison of polynucleotide gene sequences or of polynucleotide gene expression products, e.g., mRNA and protein, between a human tissue that is suspected of being diseased and a normal tissue of a human, are used to follow disease progression or remission in the human. Such comparisons of polynucleotide-related genes, mRNA, or protein are made as described above.

For example, increased or decreased expression of the polynucleotide-related gene in the tissue suspected of being neoplastic can indicate the presence of neoplastic cells in the tissue. The degree of increased expression of the polynucleotide gene in the neoplastic tissue relative to expression of the gene in normal tissue, or differences in the amount of increased expression of the polynucleotide gene in the neoplastic tissue over time, is used to assess the progression of the neoplasia in that tissue or to monitor the response of the neoplastic tissue to a therapeutic protocol over time. The expression pattern of any two cell types can be compared, such as low and high metastatic tumor cell lines, or cells from tissue which have and have not been exposed to a therapeutic agent.

Screening for Peptide Analogs and Antagonists

Polypeptides encoded by the instant polynucleotides and corresponding full length genes can be used to screen peptide libraries to identify binding partners, such as receptors, from among the encoded polypeptides.

- 5 Such binding partners can be useful in treating cancer, tumor progression, hyperproliferative cell growth, and/or accompanying biological or physical manifestations. For example, peptides or other compounds that are capable of binding or interacting with membrane-bound polypeptides encoded by one or more of SEQ ID NO:1-339, can be useful as a therapeutic. Also, peptides or other compounds capable of
10 altering the conformation of any of the encoded polypeptides by one or more of SEQ ID NO:1-339 can inhibit biological activity and be useful as a therapeutic.

A library of peptides may be synthesized following the methods disclosed in U.S. Pat. No. 5,010,175, and in PCT WO91/17823.

- Peptide agonists or antagonists are screened using any available method,
15 such as signal transduction, antibody binding, receptor binding, mitogenic assays, chemotaxis assays, etc. The methods described herein are presently preferred. The assay conditions ideally should resemble the conditions under which the native activity is exhibited *in vivo*, that is, under physiologic pH, temperature, and ionic strength. Suitable agonists or antagonists will exhibit strong inhibition or enhancement of the
20 native activity at concentrations that do not cause toxic side effects in the subject. Agonists or antagonists that compete for binding to the native polypeptide may require concentrations equal to or greater than the native concentration, while inhibitors capable of binding irreversibly to the polypeptide may be added in concentrations on the order of the native concentration.

- 25 The end results of such screening and experimentation will be at least one novel polypeptide binding partner, such as a receptor, encoded by a cDNA polynucleotide or gene of the invention, and at least one peptide agonist or antagonist of the novel binding partner. Such agonists and antagonists can be used to modulate, enhance, or inhibit receptor function in cells to which the receptor is native, or in cells
30 that possess the receptor as a result of genetic engineering. Further, if the novel receptor shares biologically important characteristics with a known receptor,

information about agonist/antagonist binding may help in developing improved agonists/antagonists of the known receptor.

Therapeutics, whether polynucleotide or polypeptide or small molecule, can be tested, for example, in the mouse tumor assay described in Pei *et al.*, Mol. Endo. 5 11: 433-441 (1997).

Other models for testing polynucleotides, polypeptides, antibodies, or small molecules useful for treatment include: animal models and cell lines disclosed in Bosland. *Encyclopedia of Cancer*, Volume II, pages 1283 to 1296 (1997) by Academic Press. Other useful cell lines are described in Brothman, *Encyclopedia of Cancer*, 10 Volume II, pages 1303 to 1313 (1997) by Academic Press

Pharmaceutical Compositions and Therapeutic Uses

Pharmaceutical compositions can comprise polypeptides, antibodies, or polynucleotides of the claimed invention. The pharmaceutical compositions will comprise a therapeutically effective amount of either polypeptides, antibodies, or 15 polynucleotides of the claimed invention.

The term "therapeutically effective amount" as used herein refers to an amount of a therapeutic agent to treat, ameliorate, or prevent a desired disease or condition, or to exhibit a detectable therapeutic or preventative effect. The effect can be detected by, for example, chemical markers or antigen levels. Therapeutic effects also 20 include reduction in physical symptoms, such as decreased body temperature. The precise effective amount for a subject will depend upon the subject's size and health, the nature and extent of the condition, and the therapeutics or combination of therapeutics selected for administration. Thus, it is not useful to specify an exact effective amount in advance. However, the effective amount for a given situation can be determined by 25 routine experimentation and is within the judgment of the clinician. Specifically, the compositions of the present invention can be used to treat, ameliorate, modulate, or prevent cancer, tumor progression, hyperproliferative cell growth and/or accompanying biological or physical manifestations, including prostatic disorders.

For purposes of the present invention, an effective dose will be from about 0.01 mg/kg to 50 mg/kg or 0.05 mg/kg to about 10 mg/kg of the polynucleotide, polypeptide or antibody compositions in the individual to which it is administered.

A pharmaceutical composition can also contain a pharmaceutically acceptable carrier. The term "pharmaceutically acceptable carrier" refers to a carrier for administration of a therapeutic agent, such as antibodies or a polypeptide, genes, and other therapeutic agents. The term refers to any pharmaceutical carrier that does not itself induce the production of antibodies harmful to the individual receiving the composition, and which may be administered without undue toxicity. Suitable carriers may be large, slowly metabolized macromolecules such as proteins, polysaccharides, polylactic acids, polyglycolic acids, polymeric amino acids, amino acid copolymers, and inactive virus particles. Such carriers are well known to those of ordinary skill in the art.

Pharmaceutically acceptable salts can be used therein, for example, mineral acid salts such as hydrochlorides, hydrobromides, phosphates, sulfates, and the like; and the salts of organic acids such as acetates, propionates, malonates, benzoates, and the like. A thorough discussion of pharmaceutically acceptable excipients is available in *Remington's Pharmaceutical Sciences* (Mack Pub. Co., N.J. 1991).

Pharmaceutically acceptable carriers in therapeutic compositions may contain liquids such as water, saline, glycerol and ethanol. Additionally, auxiliary substances, such as wetting or emulsifying agents, pH buffering substances, and the like, may be present in such vehicles. Typically, the therapeutic compositions are prepared as injectables, either as liquid solutions or suspensions; solid forms suitable for solution in, or suspension in, liquid vehicles prior to injection may also be prepared. Liposomes are included within the definition of a pharmaceutically acceptable carrier.

Delivery Methods

Once formulated, the polynucleotide compositions of the invention can be (1) administered directly to the subject; (2) delivered ex vivo, to cells derived from the subject; or (3) delivered in vitro for expression of recombinant proteins.

Direct delivery of the compositions will generally be accomplished by injection, either subcutaneously, intraperitoneally, intravenously or intramuscularly, or delivered to the interstitial space of a tissue. The compositions can also be administered into a tumor or lesion. Other modes of administration include oral and pulmonary administration, suppositories, and transdermal applications, needles, and gene guns or hyposprays. Dosage treatment may be a single dose schedule or a multiple dose schedule.

Methods for the ex vivo delivery and reimplantation of transformed cells into a subject are known in the art and described in e.g., International Publication No. WO 93/14778. Examples of cells useful in ex vivo applications include, for example, stem cells, particularly hematopoietic, lymph cells, macrophages, dendritic cells, or tumor cells.

Generally, delivery of nucleic acids for both ex vivo and in vitro applications can be accomplished by, for example, dextran-mediated transfection, calcium phosphate precipitation, polybrene mediated transfection, protoplast fusion, electroporation, encapsulation of the polynucleotide(s) in liposomes, and direct microinjection of the DNA into nuclei, all well known in the art.

If a polynucleotide-related gene correlates with a proliferative disorder, such as neoplasia, dysplasia, and hyperplasia, the disorder may be amenable to treatment by administration of a therapeutic agent based on the polynucleotide or corresponding polypeptide.

Preparation of antisense polypeptides is discussed above. Neoplasias that are treated with the antisense composition include, but are not limited to, cervical cancers, melanomas, colorectal adenocarcinomas, Wilms' tumor, retinoblastoma, sarcomas, myosarcomas, lung carcinomas, leukemias, such as chronic myelogenous leukemia, promyelocytic leukemia, monocytic leukemia, and myeloid leukemia, and lymphomas, such as histiocytic lymphoma. Proliferative disorders that are treated with the therapeutic composition include disorders such as anhydric hereditary ectodermal dysplasia, congenital alveolar dysplasia, epithelial dysplasia of the cervix, fibrous dysplasia of bone, and mammary dysplasia. Hyperplasias, for example, endometrial, adrenal, breast, prostate, or thyroid hyperplasias or pseudoepitheliomatous hyperplasia

of the skin, are treated with antisense therapeutic compositions. Even in disorders in which mutations in the corresponding gene are not implicated, downregulation or inhibition of gene expression can have therapeutic application. For example, decreasing gene expression can help to suppress tumors in which enhanced expression of the gene is implicated.

Both the dose of the antisense composition and the means of administration are determined based on the specific qualities of the therapeutic composition, the condition, age, and weight of the patient, the progression of the disease, and other relevant factors. Administration of the therapeutic antisense agents of the invention includes local or systemic administration, including injection, oral administration, particle gun or catheterized administration, and topical administration. Preferably, the therapeutic antisense composition contains an expression construct comprising a promoter and a polynucleotide segment of at least 12, 22, 25, 30, or 35 contiguous nucleotides of the antisense strand. Within the expression construct, the polynucleotide segment is located downstream from the promoter, and transcription of the polynucleotide segment initiates at the promoter.

Various methods are used to administer the therapeutic composition directly to a specific site in the body. For example, a small metastatic lesion is located and the therapeutic composition injected several times in several different locations within the body of tumor. Alternatively, arteries which serve a tumor are identified, and the therapeutic composition injected into such an artery, in order to deliver the composition directly into the tumor. A tumor that has a necrotic center is aspirated and the composition injected directly into the now empty center of the tumor. The antisense composition is directly administered to the surface of the tumor, for example, by topical application of the composition. X-ray imaging is used to assist in certain of the above delivery methods.

Receptor-mediated targeted delivery of therapeutic compositions containing an antisense polynucleotide, subgenomic polynucleotides, or antibodies to specific tissues is also used. Receptor-mediated DNA delivery techniques are described in, for example, Findeis *et al.*, *Trends in Biotechnol.* (1993) 11:202-205; Chiou *et al.*, (1994) *Gene Therapeutics: Methods And Applications Of Direct Gene Transfer* (J.A.

Wolff, ed.); Wu & Wu, *J. Biol. Chem.* (1988) 263:621-24; Wu *et al.*, *J. Biol. Chem.* (1994) 269:542-46; Zenke *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1990) 87:3655-59; Wu *et al.*, *J. Biol. Chem.* (1991) 266:339-42. Preferably, receptor-mediated targeted delivery of therapeutic compositions containing antibodies of the invention is used to
5 deliver the antibodies to specific tissue.

Therapeutic compositions containing antisense subgenomic polynucleotides are administered in a range of about 100 ng to about 200 mg of polynucleotides for local administration in a gene therapy protocol. Concentration ranges of about 500 ng to about 50 mg, about 1 μ g to about 2 mg, about 5 μ g to about
10 500 μ g, and about 20 μ g to about 100 μ g of polynucleotides can also be used during a gene therapy protocol. Factors such as method of action and efficacy of transformation and expression are considerations which will affect the dosage required for ultimate efficacy of the antisense subgenomic polynucleotides. Where greater expression is desired over a larger area of tissue, larger amounts of EST antisense subgenomic
15 polynucleotides or the same amounts readministered in a successive protocol of administrations, or several administrations to different adjacent or close tissue portions of, for example, a tumor site, may be required to effect a positive therapeutic outcome. In all cases, routine experimentation in clinical trials will determine specific ranges for optimal therapeutic effect. A more complete description of gene therapy vectors,
20 especially retroviral vectors, is contained in U.S. Serial No. 08/869,309, which is expressly incorporated herein, and in section G below.

For genes encoding polypeptides or proteins with anti-inflammatory activity, suitable use, doses, and administration are described in U.S. Patent No. 5,654,173, incorporated herein by reference. Therapeutic agents also include antibodies
25 to proteins and polypeptides, as described in U.S. Patent No. 5,654,173.

Gene Therapy

The therapeutic polynucleotides and polypeptides of the present invention may be utilized in gene delivery vehicles. The gene delivery vehicle may be of viral or non-viral origin (see generally, Jolly, *Cancer Gene Therapy* (1994) 1:51-64;
30 Kimura, *Human Gene Therapy* (1994) 5:845-852; Connelly, *Human Gene Therapy*

(1995) 1:185-193; and Kaplitt, *Nature Genetics* (1994) 6:148-153). Gene therapy vehicles for delivery of constructs including a coding sequence of a therapeutic of the invention can be administered either locally or systemically. These constructs can utilize viral or non-viral vector approaches. Expression of such coding sequences can be induced using endogenous mammalian or heterologous promoters. Expression of the coding sequence can be either constitutive or regulated.

The present invention can employ recombinant retroviruses which are constructed to carry or express a selected nucleic acid molecule of interest. Retrovirus vectors that can be employed include those described in EP 0 415 731; WO 90/07936; WO 94/03622; WO 93/25698; WO 93/25234; U.S. Patent No. 5, 219,740; WO 93/11230; WO 93/10218; Vile and Hart, *Cancer Res.* (1993) 53:3860-3864; Vile and Hart, *Cancer Res.* (1993) 53:962-967; Ram et al., *Cancer Res.* (1993) 53:83-88; Takamiya et al., *J. Neurosci. Res.* (1992) 33:493-503; Baba et al., *J. Neurosurg.* (1993) 79:729-735; U.S. Patent no. 4,777,127; GB Patent No. 2,200,651; and EP 0 345 242. Preferred recombinant retroviruses include those described in WO 91/02805.

Packaging cell lines suitable for use with the above-described retroviral vector constructs may be readily prepared (see PCT publications WO 95/30763 and WO 92/05266), and used to create producer cell lines (also termed vector cell lines) for the production of recombinant vector particles. Within particularly preferred embodiments of the invention, packaging cell lines are made from human (such as HT1080 cells) or mink parent cell lines, thereby allowing production of recombinant retroviruses that can survive inactivation in human serum.

The present invention also employs alphavirus-based vectors that can function as gene delivery vehicles. Such vectors can be constructed from a wide variety of alphaviruses, including, for example, Sindbis virus vectors, Semliki forest virus (ATCC VR-67; ATCC VR-1247), Ross River virus (ATCC VR-373; ATCC VR-1246) and Venezuelan equine encephalitis virus (ATCC VR-923; ATCC VR-1250; ATCC VR 1249; ATCC VR-532). Representative examples of such vector systems include those described in U.S. Patent Nos. 5,091,309; 5,217,879; and 5,185,440; and PCT Publication Nos. WO 92/10578; WO 94/21792; WO 95/27069; WO 95/27044; and WO 95/07994.

Gene delivery vehicles of the present invention can also employ parvovirus such as adeno-associated virus (AAV) vectors. Representative examples include the AAV vectors disclosed by Srivastava in WO 93/09239, Samulski et al., *J. Vir.* (1989) 63:3822-3828; Mendelson et al., *Virol.* (1988) 166:154-165; and Flotte et al., *PNAS* (1993) 90:10613-10617.

Representative examples of adenoviral vectors include those described by Berkncr. *Biotechniques* (1988) 6:616-627; Rosenfeld et al., *Science* (1991) 252:431-434; WO 93/19191; Kolls et al., *PNAS* (1994) 91:215-219; Kass-Eisler et al., *PNAS* (1993) 90:11498-11502; Guzman et al., *Circulation* (1993) 88:2838-2848; Guzman et al., *Cir. Res.* (1993) 73:1202-1207; Zabner et al., *Cell* (1993) 75:207-216; Li et al., *Hum. Gene Ther.* (1993) 4:403-409; Cailaud et al., *Eur. J. Neurosci.* (1993) 5:1287-1291; Vincent et al., *Nat. Genet.* (1993) 5:130-134; Jaffe et al., *Nat. Genet.* (1992) 1:372-378; and Levrero et al., *Gene* (1991) 101:195-202. Exemplary adenoviral gene therapy vectors employable in this invention also include those described in WO 94/12649, WO 93/03769; WO 93/19191; WO 94/28938; WO 95/11984 and WO 95/00655. Administration of DNA linked to killed adenovirus as described in Curiel, *Hum. Gene Ther.* (1992) 3:147-154 may be employed.

Other gene delivery vehicles and methods may be employed, including polycationic condensed DNA linked or unlinked to killed adenovirus alone, for example Curiel, *Hum. Gene Ther.* (1992) 3:147-154; ligand linked DNA, for example see Wu, *J. Biol. Chem.* (1989) 264:16985-16987; eukaryotic cell delivery vehicles cells, for example see U.S. Serial No. 08/240,030, filed May 9, 1994, and U.S. Serial No. 08/404,796; deposition of photopolymerized hydrogel materials; hand-held gene transfer particle gun, as described in U.S. Patent No. 5,149,655; ionizing radiation as described in U.S. Patent No. 5,206,152 and in WO92/11033; nucleic charge neutralization or fusion with cell membranes. Additional approaches are described in Philip, *Mol. Cell Biol.* (1994) 14:2411-2418, and in Woffendin, *Proc. Natl. Acad. Sci.* (1994) 91:1581-1585.

Naked DNA may also be employed. Exemplary naked DNA introduction methods are described in WO 90/11092 and U.S. Patent No. 5,580,859.

Further non-viral delivery suitable for use includes mechanical delivery systems such as the approach described in Woffendin *et al.*, *Proc. Natl. Acad. Sci. USA* (1994) 91(24):11581-11585.

Computer-Related Embodiments

5 In general, a library of polynucleotides is a collection of sequence information, which information is provided in either biochemical form (*e.g.*, as a collection of polynucleotide molecules), or in electronic form (*e.g.*, as a collection of polynucleotide sequences stored in a computer-readable form, as in a computer system and/or as part of a computer program). The sequence information of the
10 polynucleotides can be used in a variety of ways, *e.g.*, as a resource for gene discovery, as a representation of sequences expressed in a selected cell type (*e.g.*, cell type markers), and/or as markers of a given disease or disease state. In general, a disease marker is a representation of a gene product that is present in all cells affected by disease either at an increased or decreased level relative to a normal cell (*e.g.*, a cell of
15 the same or similar type that is not substantially affected by disease).

The nucleotide sequence information of the library can be embodied in any suitable form, *e.g.*, electronic or biochemical forms. For example, a library of sequence information embodied in electronic form comprises an accessible computer data file (or, in biochemical form, a collection of nucleic acid molecules) that contains
20 the representative nucleotide sequences of genes that are differentially expressed (*e.g.*, overexpressed or underexpressed) as between, for example, a cancerous cell and a normal cell. Biochemical embodiments of the library include a collection of nucleic acids that have the sequences of the genes in the library, where the nucleic acids can correspond to the entire gene in the library or to a fragment thereof, as described in
25 greater detail below.

The polynucleotide libraries of the subject invention generally comprise sequence information of a plurality of polynucleotide sequences, where at least one of the polynucleotides has a sequence of any of SEQ ID NOs:1-339. By plurality is meant at least 2, usually at least 3 and can include up to all of SEQ ID NOs:1-339. The length
30 and number of polynucleotides in the library will vary with the nature of the library,

e.g., if the library is an oligonucleotide array, a cDNA array, a computer database of the sequence information, etc.

Where the library is an electronic library, the nucleic acid sequence information can be present in a variety of media. "Media" refers to a manufacture, other than an isolated nucleic acid molecule, that contains the sequence information of the present invention. Such a manufacture provides the genome sequence or a subset thereof in a form that can be examined by means not directly applicable to the sequence as it exists in a nucleic acid. For example, the nucleotide sequence of the present invention, *e.g.*, the nucleic acid sequences of any of the polynucleotides of SEQ ID NOs:1-339, can be recorded on computer readable media, *e.g.*, any medium that can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media, such as a floppy disc, a hard disc storage medium, and a magnetic tape; optical storage media such as CD-ROM; electrical storage media such as RAM and ROM; and hybrids of these categories such as magnetic/optical storage media. One of skill in the art can readily appreciate how any of the presently known computer readable mediums can be used to create a manufacture comprising a recording of the present sequence information. "Recorded" refers to a process for storing information on computer readable medium, using any such methods as known in the art. Any convenient data storage structure can be chosen, based on the means used to access the stored information. A variety of data processor programs and formats can be used for storage, *e.g.*, word processing text file, database format, *etc.* In addition to the sequence information, electronic versions of the libraries of the invention can be provided in conjunction or connection with other computer-readable information and/or other types of computer-readable files (*e.g.*, searchable files, executable files, *etc.*, including, but not limited to, for example, search program software, *etc.*).

By providing the nucleotide sequence in computer readable form, the information can be accessed for a variety of purposes. Computer software to access sequence information is publicly available. For example, the BLAST (Altschul et al., *supra.*) and BLAZE (Brutlag et al. *Comp. Chem.* (1993) 17:203) search algorithms on a Sybase system can be used to identify open reading frames (ORFs) within the genome that contain homology to ORFs from other organisms.

As used herein, "a computer-based system" refers to the hardware means, software means, and data storage means used to analyze the nucleotide sequence information of the present invention. The minimum hardware of the computer-based systems of the present invention comprises a central processing unit (CPU), input
5 means, output means, and data storage means. A skilled artisan can readily appreciate that any one of the currently available computer-based system are suitable for use in the present invention. The data storage means can comprise any manufacture comprising a recording of the present sequence information as described above, or a memory access means that can access such a manufacture.

10 "Search means" refers to one or more programs implemented on the computer-based system, to compare a target sequence or target structural motif, or expression levels of a polynucleotide in a sample, with the stored sequence information. Search means can be used to identify fragments or regions of the genome that match a particular target sequence or target motif. A variety of known algorithms are publicly
15 known and commercially available, *e.g.*, MacPattern (EMBL), BLASTN and BLASTX (NCBI). A "target sequence" can be any polynucleotide or amino acid sequence of six or more contiguous nucleotides or two or more amino acids, preferably from about 10 to 100 amino acids or from about 30 to 300 nt. A variety of comparing means can be used to accomplish comparison of sequence information from a sample (*e.g.*, to analyze
20 target sequences, target motifs, or relative expression levels) with the data storage means. A skilled artisan can readily recognize that any one of the publicly available homology search programs can be used as the search means for the computer based systems of the present invention to accomplish comparison of target sequences and motifs. Computer programs to analyze expression levels in a sample and in controls are
25 also known in the art.

A "target structural motif," or "target motif," refers to any rationally selected sequence or combination of sequences in which the sequence(s) are chosen based on a three-dimensional configuration that is formed upon the folding of the target motif, or on consensus sequences of regulatory or active sites. There are a variety of
30 target motifs known in the art. Protein target motifs include, but are not limited to, enzyme active sites and signal sequences. Nucleic acid target motifs include, but are

not limited to, hairpin structures, promoter sequences and other expression elements such as binding sites for transcription factors.

A variety of structural formats for the input and output means can be used to input and output the information in the computer-based systems of the present invention. One format for an output means ranks the relative expression levels of different polynucleotides. Such presentation provides a skilled artisan with a ranking of relative expression levels to determine a gene expression profile..

As discussed above, the "library" of the invention also encompasses biochemical libraries of the polynucleotides of SEQ ID NOs:1-339, *e.g.*, collections of nucleic acids representing the provided polynucleotides. The biochemical libraries can take a variety of forms, *e.g.*, a solution of cDNAs, a pattern of probe nucleic acids stably associated with a surface of a solid support (*i.e.*, an array) and the like. Of particular interest are nucleic acid arrays in which one or more of SEQ ID NOs:1-339 is represented on the array. By array is meant a an article of manufacture that has at least a substrate with at least two distinct nucleic acid targets on one of its surfaces, where the number of distinct nucleic acids can be considerably higher, typically being at least 10 nt, usually at least 20 nt and often at least 25 nt. A variety of different array formats have been developed and are known to those of skill in the art. The arrays of the subject invention find use in a variety of applications, including gene expression analysis, drug screening, mutation analysis and the like, as disclosed in the above-listed exemplary patent documents.

In addition to the above nucleic acid libraries, analogous libraries of polypeptides are also provided, where the where the polypeptides of the library will represent at least a portion of the polypeptides encoded by SEQ ID NOs:1-339.

The present invention will now be illustrated by reference to the following examples which set forth particularly advantageous embodiments. However, it should be noted that these embodiments are illustrative and are not to be construed as restricting the invention in any way.

EXAMPLES

EXAMPLE 1

ISOLATION OF THE POLYNUCLEOTIDES

cDNA libraries were prepared from PrEC, normal human prostate
5 epithelial cells, and LNCaP, a cell line derived from human lymph node metastasized
prostate cancer. PrEC cells are available from Clonetics, San Diego, California, U.S.A.
LNCaP cells are available from the ATCC, Manassas, Virginia, U.S.A.

Using a PCR technique and reagents available from Clontech, Palo Alto,
California, USA (CLONTECH PCR-Select™), mRNA up-regulated in LNCaP was
10 captured and amplified. The captured polynucleotide inserts were inserted in the
pCR2.1 vector, available from Invitrogen, Carlsbad, California, U.S.A. The vectors
with the inserts were transformed into *E. coli* cells.

EXAMPLE 2

CONFIRMATION OF DIFFERENTIAL DISPLAY

15 Ten clones were chosen at random, and up-regulation of the sequences of
these clone inserts in LNCaP versus PrEC cells was confirmed by Northern blot. Dot
blots were performed on 168 clones and up-regulation was confirmed.

Further, sequencing of the clones showed that prostate specific antigen
(PSA) and prostate specific membrane antigen (PSMA) sequences were isolated by the
20 process described in Example 1. A good correlation between increased serum PSA
levels and prostate tumors has been observed. PSMA, a cell surface antigen, is another
observed marker for prostate cancer. See Bosland, Encyclopedia of Cancer, Volume II,
pages 1283-1296 (1997), Academic Press. Thus, the data confirm that up-regulated
mRNA characteristic of gene expression in prostate cancer was cloned by the method of
25 Example 1.

EXAMPLE 3

POLYNUCLEOTIDE SEQUENCES

The sequence results are shown in SEQ ID NO:1-339. For the sequencing experiments, each clone was named SL-1 to SL-209. Inserts from some of the clones were sequenced more than once. Each sequence was designated a unique combination of two names. This unique combination is shown in Table 1 in columns 2 and 3, denoted as "Sequence Name" and "Other Seq Name."

Table 1 indicates all the sequences that correspond to each clone. Thus, all the sequences corresponding to clone SL-3, for example, are grouped together in Table 1.

Clones also were assigned cluster numbers. See column 4 of Table 1. Clones with the same cluster number generally comprise sequence derived from the same mRNA transcripts.

The last column of Table 1 indicates the nearest neighbor as determined by an alignment to sequences in a publicly available database.

A consensus for the sequence of each clone can be constructed by aligning the corresponding sequences or reverse complements thereof. Table 1 lists the names of all the sequences that correspond to each clone, and Table 2 shows the specific sequence that corresponds to each unique combination of Sequence Name and/or "Other Seq. Name."

The entire insert of some clones may not be represented by the sequences presented in Table 2. For example, the 5' and 3' ends of a clone insert may have been sequenced, but the sequences do not overlap. Additional sequence corresponding to the clone insert can be isolated and determined by constructing probes or primers from the sequences presented in Table 2 and a library of mRNA or cDNA from a prostate cell or prostate cancer cell line using the methods described above.

EXAMPLE 4

RESULTS OF PUBLIC DATABASE SEARCH

Both the nucleotide sequence and translations of masked sequences shown in the Sequence Listing were aligned with individual sequences that were publicly available. Similarity with individual sequences is used to determine the activity of the polypeptides encoded by genes corresponding to the sequences referred to in Table 2.

The sequences in SEQ ID NO:1-333 first were masked to remove the pCR2.1 vector sequences. Masking was performed by aligning the pCR2.1 sequences with each of SEQ ID NO:1-333 using the BLASTN program. Any sequence that produced an alignment with a score of less than 0.1 was masked.

A BLASTN vs. Genbank search was performed using the masked sequences with search parameters of greater than 99% overlap, 99% identity, and a p value of less than 1×10^{-40} and this resulted in discard of sequences. Sequences from this search also were discarded if the inclusive parameters were met, but the sequence was ribosomal or vector-derived.

The resulting sequences from the previous search were classified into three groups (1, 2 and 3 below) and searched in a BLASTX vs. NRP (non-redundant proteins) database search: (1) unknown (no hits in the Genbank search), (2) weak similarity (greater than 45% identity and p value of less than 1×10^{-5}), and (3) high similarity (greater than 60% overlap, greater than 80% identity, and p value less than 1×10^{-5}). This search resulted in discard of sequences as having greater than 99% overlap, greater than 99% identity, and p value of less than 1×10^{-40} .

The remaining sequences were classified as unknown (no hits), weak similarity, and high similarity (parameters as above). Two searches were performed on this set of sequences. First, a BLAST vs. EST database search resulted in discard of sequences with greater than 99% overlap, greater than 99% similarity and a p value of less than 1×10^{-40} ; sequences with a p value of less than 1×10^{-65} when compared to a database sequence of human origin were also excluded. Second, a BLASTN vs. Patent

GeneSeq database resulted in discard of sequences with greater than 99% identity; p value less than 1×10^{-10} ; greater than 99% overlap.

The masked sequences were translated in all six reading frames to determine the best alignment with the individual sequences. These amino acid sequences and nucleotide sequences are referred, generally, as query sequences, which
5 are aligned with the individual sequences.

Query and individual sequences were aligned using the BLAST programs, available over the world wide web.

Table 2 shows the results of the alignments. Table 2 refers to each
10 sequence by its Sequence Name and/or "Other Seq. Name" and includes the accession numbers and descriptions of nearest neighbors from the Genbank and Non-Redundant Protein searches.

The activity of the polypeptide encoded by the sequences referred to in Table 2 is expected to be the same or similar to the nearest neighbor reported in Table 2.
15 The accession number of the nearest neighbor is reported, providing a reference to the activities exhibited by the nearest neighbor. The search program and database used for the alignment also are indicated as well as a calculation of the p value.

Full length sequences or fragments of the polynucleotide sequences of the nearest neighbors can be used as probes and primers to identify and isolate the full
20 length sequence corresponding to sequence referred to in Table 2. Although full length sequences can be obtained from the cell lines described above, the nearest neighbors can indicate a tissue or cell type to be used to construct a library for the full-length sequences of those referred to in Table 2.

The sequences referred to in Table 2 and the translations thereof may be
25 human homologs of known genes of other species or novel allelic variants of known human genes. In such cases, these new human sequences may be suitable as diagnostics, prognostics, or therapeutics. As diagnostics, the human sequences exhibit greater specificity in detecting and differentiating human cell lines and types than homologs of other species. The human polypeptides are less likely to be immunogenic
30 when administered to humans than homologs from other species. Further, on

administration to humans, the encoded polypeptides can show greater specificity or can be better regulated by other human proteins than are homologs from other species.

In the preferred embodiments of the invention, the sequences shown in SEQ ID NO:1-339 consisting of the unmasked regions should be considered as the
5 source of probes and primers, as these sequences are most representative of the distinguishing portions of these polynucleotides.

Generally, the masking itself does not influence the search results as shown in Table 2, except to eliminate multiple "hits" based on similarity to repetitive regions common to more than one polypeptide.

10

EXAMPLE 5

ANALYSIS OF CLONES SL-5, SL-9, SL-68, AND SL-173

Clone SL-5 (SEQ ID NO:14 and 334)

By Northern Blot, a 4.1 kb band was observed in expressed in normal prostate, testis, and lymphoblastic leukemia. It was also expressed in the cell lines
15 LNCaP, and MDA PCa 2A and 2B (metastatic prostate cells into bone, androgen sensitive). Additional sequence corresponding to SEQ ID NO:14 is disclosed in SEQ ID NO:334.

Expression of SL-5 was investigated in normal and tumor tissues using immunohistochemistry. Antibody was prepared using two sequences from clone SL-5:
20 H₂N-CGPRLPSFPCPTHEPSTGQLSK-CONH₂ and H₂N-CKDSQGLSDFKRNSRTTR-RSYKCCONH₂. Using polyclonal antibodies raised against a mixture of these polypeptides, immunohistochemistry (IHC) was performed on a variety of tumor tissues and corresponding normal tissue. The methods used were those described for the Manual IHC Protocol using BioGenex Reagents and Zymed AEC Solution, as known in
25 the art. As shown in Figure 3, SL-5 was detected in the following tumor tissue: adrenal, ovary, breast, colon, prostate, uterus, cervix, kidney, pancreas, liver, stomach, lymphoma, seminoma, thyroid, melanoma, basal cell carcinoma, and other tumor tissues. Where comparative normal tissue was available, expression in the

corresponding normal tissue was lower than in the tumor tissue. Thus, SL-5 is a useful marker for cancer tissue including prostate.

Clone SL-9 (SEQ ID NO:18)

By Northern Blot, sequences from SL-9 were specifically expressed in
5 normal spleen and normal peripheral blood leukocyte. Expression of the SL-9 sequences was observed also in promyelocytic leukemia HL-60, chronic myelogenous leukemia K-562, lymphoblastic leukemia MOLT-4, Burkitt's lymphoma, and Raji cancer cell lines by Northern Blot.

Clone SL-173 (SEQ ID NO:153 and 154)

10 By Northern Blot, SL173 was found in every cancer cell line tested. Sequence from SL-173 has similarity to and may be a human homologue of the rat tumor transforming gene, which was found in the pituitary and described in Pei *et al.*, Mol. Endo. 11: 433-441 (1997) and Pei, J. Biol. Chem. 273(9): 5219-5225 (1998). When the rat tumor transforming gene was injected in NIH3T3cells, the cells became
15 transformed and were able to form a tumor when injected into mice. (Pei *et al.*, Mol. Endo. supra).

Clone SL-68 (SEQ ID NO:218 and 219)

Two transcripts. 2.6kb and 4.3kb, were observed in normal spleen, thymus and peripheral blood leukocytes, as well as in promyelocytic leukemia, chronic
20 myelogenous leukemia and lymphoblastic leukemia. The 4.3kb transcript was seen in normal testis, colon, Hela cell S3, colorectal adenocarcinoma and melanoma. The 2.6kb band was found in the following prostate cell lines: PC-3 (metastatic to bone, androgen insensitive); DU-145 (metastatic to brain, androgen insensitive); FFpz (primary cells derived from normal prostate epithelium); Ffca (primary cells derived
25 from Gleason Grade 3 prostate cancer epithelium); and WO-CA (primary cells derived from Gleason Grade 4 prostate cancer epithelium). However, higher expression was observed in LNCaP, MDA PCa 2A, HPV-7 and HPV-10. A 9.5kb transcript was also observed in MDA PCa 2A and 2B. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:335.

Clone SL69 (SEQ ID NO:220 and 221)

A weak 2.6kb band was observed in normal testis as well as in chronic myelogenous leukemia and lymphoblastic leukemia. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:336.

5

Clone SL86 (SEQ ID NO:242 and 243)

The sequence was expressed in normal prostate (2.7kb and 1.1kb) and testis (1.1kb). Low expression was observed in a cancer cell line blot using the cell lines described above. 1.1kb and 2.7kb transcripts were observed in the cell lines LNCaP, and MDA PCa 2a and 2b (metastatic prostate cells into bone, androgen sensitive), and weak 1.1kb transcript was seen in HPV-7 (immortalized normal prostate cells) and HPV-10 (immortalized prostate cancer cells). Additional sequence corresponding to this clone is disclosed in SEQ ID NO:337.

15 Clone SL195 (SEQ ID NO:288 and 289)

The sequence was expressed in normal prostate as a 1.9kb transcript, and the same transcript also observed in all cell lines in the cancer cell line blot described above. It was more heavily expressed in HeLa cell S3 and chronic myelogenous leukemia, and was expressed in all prostate cell lines. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:338.

20

Clone SL197 (SEQ ID NO:292 and 293)

Two transcripts, 2.4kb and 4kb, were observed in normal prostate and testis. Two very weak 2.4kb signals were observed in HeLa cell S3 and chronic myelogenous leukemia. The 2.4kb transcript was expressed in all prostate cell lines. A 4kb transcript was found in LNCaP, MDA PCa 2A and 2B. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:339.

25

Those skilled in the art will recognize, or be able to ascertain, using not more than routine experimentation, many equivalents to the specific embodiments of

30

the invention described herein. Such specific embodiments and equivalents are intended to be encompassed by the following claims.

All patents, published patent applications and publications cited herein are incorporated by reference as if set forth fully herein.

TABLE I

PATENT

| Clone # | Sequence Name | Other Seq Name | Clone # Cluster # | Nearest Neighbor If Available |
|---------|---|--|-------------------|--|
| SL-001 | SL001 SL001M13 | 19sl1 | SL-001 | S60754 (VNTR locus DXZ4) |
| SL-002 | SL002 | 20sl2 | SL-002 | L07935 HUMVNTRA |
| SL-003 | SL003 | 21sl3 | SL-003 | AB006625 - KIAA0287 gene |
| | SL003 | 35-sl3-1m13 | | |
| | SL003 | 35-sl3-1t7 | | |
| | SL003 | 37-sl3-1m13 | | |
| | SL003 | 39-sl3-1m13 | | |
| SL-004 | SL004 SL004M13 | 22sl4 | SL-004 | |
| SL-005 | SL005 SL005 | 23sl5 30sl11b | SL-005 | |
| SL-006 | SL006 SL006M13 | 24sl6 | SL-006 | cosmid genomic clone |
| SL-007 | SL007 SL007 SL007 SL007 SL007 SL007 SL007 | 25sl7 28-sl7-1m13 28-sl7-1t7 30-sl7-1m13 30-sl7-1t7 32-sl7-1m13 32-sl7-1t7 | SL-003 | AB006625-KIAA0287 |
| SL-008 | SL008 | 26sl8 | SL-008 | HUMP65 E=9e-62 L-plastin. Phosphoprotein (p65) |
| SL-009 | SL009 SL009M13 | 27sl9 | | |
| SL-010 | SL010 | 28sl10 | SL-005 | |
| SL-011 | SL011 | 29sl11a | SL-011 | HSU10685 - MAGE-10 Gene |
| SL-012 | SL012 | 31sl12 | SL-011 | HSU10685 - MAGE-10 Gene |
| SL-013 | SL013 | 32sl13 | | |
| SL-015 | SL015 SL015 SL015 SL015 | 34sl15 46-sl15-2m13 47-sl15-2m13 47-sl15-2t7 | SL-015 | HSU90336 - PEG3 mRNA HSMRNAEN - Enkephalinase |
| SL-016 | SL016 SL016 SL016 SL016 SL016 SL016 SL016 SL016 SL016 SL016 SL016 | 10-sl16-1m13 10-sl16-1t7 11-sl16-1m13 18-sl16-2m13 18-sl16-2t7 19-sl16-2m13 19-sl16-2t7 20-sl16-2m13 20-sl16-2t7 35sl16 | SL-016 | |

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| | | | | |
|--------|--|---------------------------------------|--------|---|
| | SL016 | 9-sl16-lt7 | | |
| SL-017 | SL017 | 36sl17 | SL-017 | HUMORF01 - KIAA0101 gene |
| SL-028 | SL028m13 SL028lt7 | B1 B1 | SL-028 | |
| SL-029 | SL029m13 SL029lt7 | WE97.C1.M13 WE97.C1.T7 | SL-029 | |
| SL-032 | SL032m13 SL032lt7 | WE97.D1.M13 WE97.D1.T7 | SL-032 | HSTPI1G TPI1 gene for triosephosphate isomerase. |
| SL-036 | SL036m13 SL036lt7 | WE97.E1.M13 WE97.E1.T7 | SL-036 | HSU81599 homeodomain protein HOXB13 |
| SL-037 | SL037.m13 SL037.m13 SL037lt7 | C1 WE97.F1.M13 C1 | SL-005 | |
| SL-040 | SL040m13 SL040lt7 | D1 D1 | SL-040 | |
| SL-041 | SL041m13 SL041m13 SL041lt7 SL041lt7 | E1 WE97.H1.M13 E1 WE97.H1.T7 | SL-016 | |
| SL-042 | SL042m13 SL042lt7 | WE97.A2.M13 WE97.A2.T7 | SL-008 | HUMP65 phosphoprotein (p65) HUMPLASTA L-plastin gene |
| SL-044 | SL044m13 SL-044lt7 | WE97.B2.M13 WE97.B2.T7 | SL-016 | |
| SL-045 | SL045m13 SL045lt7 | WE97.C2.M13 WE97.C2.T7 | SL-045 | genomic DNA |
| SL-046 | SL046m13 SL046lt7 | WE97.D2.M13 WE97.D2.T7 | SL-046 | |
| SL-047 | SL047m13 SL047lt7 | WE97.E2.M13 WE97.E2.T7 | SL-047 | |
| SL-050 | SL050m13 SL050lt7 | WE97.F2.M13 WE97.F2.T7 | SL-050 | |
| SL-051 | SL051m13 SL051lt7 | WE97.G2.M13 WE97.G2.T7 | SL-051 | |
| SL-054 | SL054m13 SL054lt7 | WE97.H2.M13 WE97.H2.T7 | SL-054 | |
| SL-055 | SL055m13 SL055lt7 SL055lt7 | F1 F1 WE97.A3.T7 | SL-050 | |

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| | | | | |
|--------|---------------------------------|---------------------------|--------|--|
| SL-057 | SL057m13 SL057t7 | WE97.C3.M13 WE97.C3.T7 | SL-057 | |
| SL-058 | SL058m13 SL058t7 | WE97.D3.M13 WE97.D3.T7 | SL-058 | HSLRPR1GN leucine-rich primary response protein 1. |
| SL-061 | SL061m13 SL061t7 | WE97.E3.M13 WE97.E3.T7 | SL-028 | |
| SL-062 | SL062m13 SL062t7 | WE97.F3.M13 WE97.F3.T7 | SL-028 | |
| SL-064 | SL064m13 SL064t7 | WE97.G3.M13 WE97.G3.T7 | SL-064 | |
| SL-066 | SL066m13 SL066t7 | WE97.H3.M13 WE97.H3.T7 | SL-016 | |
| SL-067 | SL067m13 SL067t7 SL067t7 | H1 H1 WE97.A4.T7 | SL-067 | HUMKIAAP - KIAA0095 gene |
| SL-068 | SL068m13 SL068t7 | WE97.B4.M13 WE97.B4.T7 | SL-068 | |
| SL-069 | SL069m13 SL069t7 | WE97.C4.M13 WE97.C4.T7 | SL-069 | |
| SL-071 | SL071m13 SL071t7 | WE97.D4.M13 WE97.D4.T7 | SL-071 | |
| SL-072 | SL072m13 SL072t7 | WE97.E4.M13 WE97.E4.T7 | SL-015 | HSU90336 Human PEG3 mRNA AB006625 KIAA0287 |
| SL-074 | SL074m13 SL074t7 | WE97.F4.M13 WE97.F4.T7 | SL-074 | |
| SL-075 | SL075m13 SL075t7 | WE97.G4.M13 WE97.G4.T7 | SL-075 | |
| SL-076 | SL076m13 SL076t7 | WE97.H4.M13 WE97.H4.T7 | SL-076 | |
| SL-077 | SL077m13 SL077t7 | WE97.A5.M13 WE97.A5.T7 | SL-077 | |
| SL-078 | SL078m13 SL078m13 SL078t7 | A2 WE97.B5.M13 A2 | SL-016 | BAC clone (with Alu) AB006625 - KIAA0287 gene |
| SL-081 | SL081m13 SL081t7 | WE97.E5.M13 WE97.E5.T7 | SL-003 | |
| SL-083 | SL083m13 SL083t7 | WE97.G5.M13 WE97.G5.T7 | SL-083 | |
| SL-084 | SL084m13 SL084t7 | WE97.H5.M13 WE97.H5.T7 | SL-084 | (HS295C6 Human DNA sequence) |

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| | | | | |
|--------|----------|-------------|---------|--|
| SL-085 | SL085m13 | WE97.A6.M13 | SL-085 | |
| SL-086 | SL086m13 | WE97.B6.M13 | SL-086 | |
| | SL086t7 | WE97.B6.T7 | | |
| SL-087 | SL087m13 | WE97.C6.M13 | SL-087 | EST and Mus musculus ras-GTPase-activating protein |
| | SL087t7 | WE97.C6.T7 | | |
| SL-088 | SL088m13 | WE97.D6.M13 | SL-015 | HSU90336 Human PEG3 & AB006625 - KIAA0287 gene |
| | SL088t7 | WE97.D6.T7 | | |
| SL-089 | SL089m13 | WE97.E6.M13 | SL-089 | |
| | SL089t7 | WE97.E6.T7 | | |
| SL-090 | SL090m13 | D2 | SL-090 | |
| | SL090t7 | D2 | | |
| SL-091 | SL091m13 | WE97.G6.M13 | SL-091 | |
| | SL091t7 | WE97.G6.T7 | | |
| SL-092 | SL092m13 | WE97.H6.M13 | SL-092 | HUMPRKACB testis-specific cAMP-dependent protein kinase catalytic subunit (C-beta isoform) |
| | SL092t7 | WE97.H6.T7 | | |
| SL-093 | SL093m13 | E2 | SL-008 | HUMLPLSTN2 L-plastin gene |
| | SL093t7 | E2 | | |
| SL-094 | SL094m13 | WE97.B7.M13 | SL-094 | |
| | SL094t7 | WE97.B7.T7 | | |
| SL-095 | SL095m13 | WE97.C7.M13 | SL-003 | AB006625 - KIAA0287 |
| | SL095t7 | WE97.C7.T7 | | |
| SL-096 | SL096m13 | WE97.D7.M13 | SL-096 | |
| | SL096t7 | WE97.D7.T7 | | |
| SL-097 | SL097m13 | | SL-071 | |
| | SL097t7 | | | |
| SL-098 | SL098m13 | | SL-098 | |
| | SL098t7 | | | |
| SL-099 | SL099m13 | | SL-016 | |
| | SL099t7 | | | |
| SL-100 | SL100m13 | F2 | SL-085 | SL100m13 Alu - 2e-71 |
| | SL100m13 | | | |
| | SL100t7 | F2 | | |
| | SL100t7 | | | |
| SL-102 | SL102m13 | | SL-102 | HSRPL32 ribosomal protein L32 |
| | SL102t7 | | | |
| SL-103 | SL103m13 | | SL-103 | |
| | SL103t7 | | | |
| SL-105 | SL105m13 | | SL-105 | |
| | SL105t7 | | | |
| SL-106 | SL106m13 | | SL-106 | |
| | SL106t7 | | | |
| SL-107 | SL107m13 | | SL-016? | SL107m13 -Alu - 2e-78 |
| | SL107t7 | | | |
| SL-110 | SL110m13 | | SL-003 | AB006625- KIAA0287 gene |

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| | | | | |
|--------|---------------------|--|--------|--|
| | SL110t7 | | | |
| SL-111 | SL111m13 SL111t7 | | SL-111 | |
| SL-112 | SL112m13 SL112t7 | | SL-112 | |
| SL-115 | SL115m13 SL115t7 | | SL-115 | D86322 - calmegin |
| SL-116 | SL116m13 SL116t7 | | SL-116 | |
| SL-117 | SL117m13 SL117t7 | | SL-117 | HUMNUMB23 = HUMNPM Human nucleolar protein (B23) or Human nucleophosmin |
| SL-118 | SL118m13 SL118t7 | | SL-118 | |
| SL-119 | SL119m13 SL119t7 | | SL-119 | |
| SL-120 | SL120m13 SL120t7 | | SL-046 | |
| SL-121 | SL121m13 SL121t7 | | SL-016 | |
| SL-122 | SL122m13 SL122t7 | | SL-122 | HUMPRKACB testis-specific cAMP-dependent protein kinase catalytic subunit (C-beta isoform) |
| SL-124 | SL124m13 SL124t7 | | SL-016 | |
| SL-125 | SL125m13 SL125t7 | | SL-125 | HSU19145 GAGE-4 (US 5,648,226) |
| SL-127 | SL127m13 SL127t7 | | SL-127 | |
| SL-128 | SL128m13 SL128t7 | | SL-005 | |
| SL-130 | SL130m13 SL130t7 | | SL-130 | |
| SL-132 | SL132m13 SL132t7 | | SL-011 | HSU10685 MAGE-10 gene (US 5,612,201) |
| SL-134 | SL134m13 SL134t7 | | SL-134 | HSC70P Hsc 70 pseudogene (Heat Shock protein) |
| SL-135 | SL135m13 SL135t7 | | SL-135 | |
| SL-138 | SL138m13 SL138t7 | | SL-051 | |
| SL-139 | SL139m13 SL139t7 | | SL-139 | Homo sapiens cosmid |
| SL-142 | SL142m13 SL142t7 | | SL-005 | |

TABLE I

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| | | | | |
|------------------------------------|---|--|------------------------------------|--|
| SL-143 | SL143m13 SL143t7 | | SL-143 | Genomic clone AC003978 |
| SL-144 | SL144m13 SL144t7 | | SL-144 | E= 3-81 |
| SL-145 SL-146 | SL145m13 SL146m13 SL146t7 | WE97.E7.M13 WE97.E7.T7 | SL-003 SL-146 | AB006625- KIAA0287 gene |
| SL-147 SL-148 | SL147m13 SL147m13 SL147t7 SL148m13 SL148t7 | G2 WE97.F7.M13 G2 WE97.G7.M13 WE97.G7.T7 | SL-147 SL-016 | (1) HSCDC2R Human cell cycle control gene CDC2 (2) HSU29091 selenium-binding |
| SL-149 SL-150 SL-151 | SL149m13 SL149t7 SL150m13 SL150t7 SL151m13 SL151t7 | H2 H2 A3 A3 WE97.B8.M13 WE97.B8.T7 | SL-149 SL-150 SL-151 | "Human DNA sequence" Genomic frag |
| SL-152 | SL152m13 SL152t7 | WE97.C8.M13 WE97.C8.T7 | SL-152 | |
| SL-153 | SL153m13 SL153t7 | WE97.D8.M13 WE97.D8.T7 | SL-153 | |
| SL-154 | SL154t7 | WE97.E8.T7 | SL-154 | HUMPAR5R - PAR-5 mRNA |
| SL-155 | SL155m13 SL155t7 | WE97.F8.M13 WE97.F8.T7 | SL-028 | SL155m13 - EST only in Mouse |
| SL-156 | SL156m13 SL156t7 | WE97.G8.M13 WE97.G8.T7 | SL-016 | |
| SL-157 | SL157m13 SL157t7 | WE97.H8.M13 WE97.H8.T7 | SL-157 | |
| SL-158 | SL158m13 SL158t7 | WE97.A9.M13 WE97.A9.T7 | SL-011 | HSU10685 MAGE-10 gene (US 5,612,201) |
| SL-159 | SL159m13 SL159t7 | WE97.B9.M13 WE97.B9.T7 | SL-159 | Chromosome 11 pac |
| SL-160 | SL160m13 SL160t7 | WE97.C9.M13 WE97.C9.T7 | SL-051 | |
| SL-161 | SL161m13 SL161t7 | WE97.D9.M13 WE97.D9.T7 | SL-161 | HUMP65 phosphoprotein (p65) HUMPLASTA L-plastin gene |
| SL-162 SL-163 | SL162m13 SL162t7 SL163m13 SL163t7 | B3 B3 WE97.F9.M13 WE97.F9.T7 | SL-162 SL-016 | HSU75330 -NCAM21 |
| SL-164 | SL164m13 SL164t7 | WE97.G9.M13 WE97.G9.T7 | SL-016 | |
| SL-165 | SL165m13 SL165t7 | WE97.H9.M13 WE97.H9.T7 | SL-165 | (genomic seq) |

TABLE I

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| | | | | |
|--------|---------------------------------|-----------------------------|--------|--|
| SL-166 | SL166m13 SL166t7 SL166t7 | C3 C3 WE97.A10.T7 | SL-166 | |
| SL-167 | SL167m13 SL167t7 | WE97.B10.M13 WE97.B10.T7 | SL-167 | HUMLPAC109 lipoprotein-associated coagulation inhibitor (LACI) gene |
| SL-168 | SL168m13 SL168t7 | WE97.C10.M13 WE97.C10.T7 | SL-168 | |
| SL-169 | SL169m13 SL169t7 | WE97.D10.M13 WE97.D10.T7 | SL-169 | HUMNEUROF oligodendrocyte mvelin glycoprotein (OMG) |
| SL-170 | SL170m13 SL170t7 | WE97.E10.M13 WE97.E10.T7 | SL-170 | |
| SL-171 | SL171m13 SL171t7 | WE97.F10.M13 WE97.F10.T7 | SL-171 | AB002374 - KIAA0376 gene |
| SL-172 | SL172m13 SL172t7 | WE97.G10.M13 WE97.G10.T7 | SL-016 | |
| SL-173 | SL173m13 SL173t7 | WE97.H10.M13 WE97.H10.T7 | SL-173 | |
| SL-174 | SL174m13 SL174t7 | D3 D3 | SL-174 | |
| SL-175 | SL175m13 SL175t7 | WE97.B11.M13 WE97.B11.T7 | SL-016 | |
| SL-176 | SL176m13 SL176t7 | WE97.C11.M13 WE97.C11.T7 | SL-176 | |
| SL-177 | SL177m13 SL177t7 | WE97.D11.M13 WE97.D11.T7 | SL-177 | |
| SL-178 | SL178m13 SL178t7 | WE97.E11.M13 WE97.E11.T7 | SL-178 | Human BAC clone |
| SL-179 | SL179m13 SL179t7 | WE97.F11.M13 WE97.F11.T7 | SL-179 | |
| SL-181 | SL181m13 SL181t7 | WE97.H11.M13 WE97.H11.T7 | SL-181 | |
| SL-182 | SL182m13 SL182m13 SL182t7 | F3 WE97.A12.M13 F3 | SL-182 | HUMAPEA apurinic/apyrimidinic endonuclease (HAPIh) HSHAP1MR Human HAPI mRNA |
| SL-183 | SL183m13 SL183t7 | WE97.B12.M13 WE97.B12.T7 | SL-046 | |
| SL-184 | SL184m13 SL184t7 | WE97.C12.M13 WE97.C12.T7 | SL-016 | |
| SL-186 | SL186m13 SL186t7 | WE97.D12.M13 WE97.D12.T7 | SL-186 | |
| SL-187 | SL187m13 SL187t7 | WE97.E12.M13 WE97.E12.T7 | SL-187 | |
| SL-188 | SL188m13 SL188t7 SL188t7 | G3 G3 WE97.F12.T7 | SL-188 | |

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| | | | | |
|--------|---------------------|-----------------------------|--------|---|
| SL-191 | SL191m13 SL191t7 | WE97.H12.M13 WE97.H12.T7 | SL-181 | |
| SL-192 | SL192m13 SL192t7 | H3 H3 | SL-192 | Human DNA sequence" |
| SL-193 | SL193m13 SL193t7 | A4 A4 | SL-193 | |
| SL-194 | SL194m13 SL194t7 | B4 B4 | SL-194 | HUMKGIDD - KIAA0098 gene |
| SL-195 | SL195m13 SL195t7 | C4 C4 | SL-195 | |
| SL-196 | SL196m13 SL196t7 | D4 D4 | SL-196 | HUMMAOAAA monoamine oxidase (MAOA) |
| SL-197 | SL197m13 SL197t7 | E4 E4 | SL-197 | |
| SL-198 | SL198m13 SL198t7 | F4 F4 | SL-198 | |
| SL-199 | SL199m13 SL199t7 | G4 G4 | SL-016 | |
| SL-201 | SL201m13 SL201t7 | A5 A5 | SL-028 | (Mouse ESTs only) |
| SL-202 | SL202m13 SL202t7 | B5 B5 | SL-202 | mitochondrial genome & ESTs(?) |
| SL-203 | SL203m13 SL203t7 | C5 C5 | SL-040 | |
| SL-204 | SL204m13 SL204t7 | D5 D5 | SL-204 | |
| SL-205 | SL205m13 SL205t7 | E5 E5 | SL-205 | |
| SL-206 | SL206m13 SL206t7 | F5 F5 | SL-015 | AB006625 - KIAA0287 gene |
| SL-207 | SL207m13 SL207t7 | G5 G5 | SL-207 | HUMFOLMES - DHFT dihydrofolate reductase gene |
| SL-208 | SL208m13 SL208t7 | H5 H5 | SL-208 | AB011165 - KIAA0593 |
| SL-209 | SL209m13 SL209t7 | A6 A6 | SL-209 | |
| | | | | |
| | batch 1 | | | |
| | batch 2 | | | |
| | batch 3 | | | |
| | batch 4 | | | |

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TABLE 2

| Seq. Name and/or Other Seq. Name | BlastN vs. Cb (nearest neighbor) | | BlastX vs. NRI/db (nearest neighbor) | | P(V) <NONE> | Accession <NONE> | Hit Description <NONE> | P(V) <NONE> |
|--|----------------------------------|--|--------------------------------------|---|----------------|---------------------|---|----------------|
| | Accession <NONE> | Hit Description <NONE> | Accession <NONE> | Hit Description <NONE> | | | | |
| 10-s116-117 | <NONE> | <NONE> | <NONE> | METALLOTHIONEIN (MT)>PIR2:S30567 metallothionein - plaice>GP:PPMMET_1 P.platessa mRNA for metallothionein | <NONE> | | | 0.32 |
| 18-s116-217 | <NONE> | <NONE> | | PROTEIN VP:(ORF1) | | MT_PLEPL | | 1.0 |
| 22-s44 | AC004601 | ***SEQUENCING IN PROGRESS ***Human Chromosome 11p14.3 PAC clone pDJ939m16; HTGS phase 1.3 unordered pieces. | 0.016 | VPI_BPCIP | | | | |
| 27-s49 | AF001549 | Homo sapiens chromosome 16 BAC clone CTT987SK-270G1 complete sequence | 7.2e-28 | ALU6_HUMAN | | | !!! ALU SUBFAMILY SP WARNING ENTRY !!! Mus musculus RAD51-binding protein RAB22 mRNA, complete cds | 3.5e-07 |
| 32-s113 | AF006259 | Homo sapiens Rad51-interacting protein mRNA, complete cds. | 1.2e-09 | MMU93583_1 | | | Mus musculus transcription factor Genesis mRNA, complete cds; A winged helix retinoid- acid hepatocyte nuclear factor 3/forkhead transcription factor; HNF3beta transcription factor | 1.2e-13 |
| 39-s13-1m13 | U07056 | Human prostatic acid phosphatase (ACPP) gene, exon 1. | 1.1e-09 | MMU141047_1 | | | | 0.36 |
| 47-s115-217 | H08056 | Sequence 2 from Patent EP 0272928. | 4.8e-52 | <NONE> | | | <NONE> | <NONE> |
| s1102m13 | AC004453 | Homo sapiens PAC clone DJ0844F09 from 7p12-p13. complete sequence. | 5.0e-50 | SIK1_YEAST | | | SIK1 PROTHIN>PIR2:S48550 hypothetical protein YLR197w - yeast (Saccharomyces cerevisiae)>GP:SCU20237_1 Saccharomyces cerevisiae SIK1p (SIK1) gene, complete cds; Possible microtubule binding protein; similar to GenBank Accession Number U114913 | 2.7e-09 |
| s1103m13 | AC002542 | Human BAC clone RGH14A06 from 7q31, complete sequence. | 0.78 | MUSIGHV01B_1 | | | Mouse CBA/J Ig heavy chain V1 region pseudogene, 5' end; Ig heavy chain precursor; Possible pseudogene | 0.30 |
| s11047 | AC002542 | Human BAC clone RGH14A06 from 7q31, complete sequence | 7.0e-11 | MUSIGHV01B_1 | | | Mouse CBA/J Ig heavy chain V1 region pseudogene, 5' end; Ig heavy chain precursor; Possible pseudogene | 0.25 |

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TABLE 2

| Seq. Name and/or Other Seq. Name | BlastN vs. Gb (nearest neighbor) | | BlastX vs. NRPdb (nearest neighbor) | | P(V) | Accession | Hit Description | P(V) | Hit Description | P(V) |
|--|----------------------------------|---|-------------------------------------|------------|---------|-----------|---|------|-----------------|------|
| | Accession | Hit Description | | | | | | | | |
| sl1067 | 148979 | Sequence 6 from patent US 5627054. | 4.3e-39 | Y694_METJA | 1.5e-08 | | HYPOTHETICAL PROTEIN MJ0694>PIR2:F64386 hypothetical protein MJ0694 - Methanococcus jannaschii>Clp_U67516_8 Methanococcus jannaschii section 58 of 150 of the complete genome; Conserved hypothetical protein; Similar to SP:Q12499 [PID:1420682PI] | | | |
| sl1077.4a | AL021395 | Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 269M15; HTGS phase 1. | 2.6e-07 | ALU4_HUMAN | 0.45 | | !!! ALU SUBFAMILY SB2 WARNING ENTRY !!! | | | |
| sl1247 | B3134 | HS-1008-A2-A05-MF-abi C11 Human Genomic Sperm Library C+ Homo sapiens genomic clone Plate=C+ 330 Col=10 Row=A; genomic survey sequence. | 1.0e-55 | ALU7_HUMAN | 1.2e-14 | | !!! ALU SUBFAMILY SQ WARNING ENTRY !!! HYPOTHETICAL TRP-ASP REPEATS CONTAINING PROTEIN C18B11.10 IN CHROMOSOME 1>PIR2:S58306 hypothetical protein spac18b11.10 - fission yeast (Schizosaccharomyces pombe)>Clp_SPAC18B11.10 Spombe chromosome 1 cosmid c18B11; Unknown; SPAC18B11.10.1e | | | |
| sl1277 | Z83818 | Human DNA sequence from PAC 138A5 on chromosome X contains ESTs. | 2.8e-16 | YA3A_SCHPO | 0.97 | | Homo sapiens BAC clone RG013N12 from 7q31.2, complete sequence; H_RG013N12.gw;1335199.a | | | |
| sl135ml3 | AC003959 | Homo sapiens chromosome 5, p1 clone 1029A7 (1.BNL1115), complete sequence. | 1.8e-57 | AC004416.5 | 0.016 | | A; thaliana transcribed sequence; clone VDV28- 22792.3'-end; similar to nonspecific lipid- transfer protein precursor | | | |
| sl1357 | AC003044 | Human PAC clone DJ055C04 from 7p15-7p21, complete sequence. | 3.8e-25 | ATT50669.1 | 0.77 | | <NONE> | | | |
| sl144ml3 | AC003684 | Homo sapiens; HTGS phase 1, 53 unordered pieces. | 2.2e-10 | <NONE> | <NONE> | | <NONE> | | | |
| sl1447 | AC004089 | *** SEQUENCING IN PROGRESS *** Human Chromosome 7 BAC Clone 155b01; HTGS phase 1, 11 unordered pieces. | 0.25 | <NONE> | <NONE> | | <NONE> | | | |

TABLE 2

PATIENT

| Seq. Name and/or Other Seq. Name | BlastN vs. Gdb (nearest neighbor) | | BlastX vs. NRPdb (nearest neighbor) | | P(V) | Hit Description | Accession | P(V) |
|----------------------------------|-----------------------------------|--|-------------------------------------|---|---------|-----------------|-----------|---------|
| | Accession | Hit Description | Accession | Hit Description | | | | |
| SI.149m13 WE97.117.M13 | M87923 | Human carcinoma cell-derived Alu RNA transcript, clone CE12. | ALU2_HUMAN | !!! ALU SUBFAMILY SB WARNING ENTRY !!! | 7.2e-55 | | | 4.7e-17 |
| SI.150m13 WE 97 AS.M13 | AI019122 | Homo sapiens DNA polymerase gamma (POLG) gene, nuclear gene encoding mitochondrial protein, partial sequence, genomic survey sequence. | <NONE> | <NONE> | 5.5e-07 | | | <NONE> |
| SI.152m13 | AF022186 | Candidium calidarium RK1 chloroplast sequence | <NONE> | <NONE> | 0.11 | | | <NONE> |
| SI.15217 | AC002524 | Homo sapiens Xp22 BAC GSHB-257G1 (Genome Systems BAC Library) complete sequence. | F40201 | artifact-warning sequence (translated ALU class F) - human | 3.5e-28 | | | 1.2e-05 |
| SI.153m13 | U29895 | Human 4-hydroxyphenylpyruvate-dioxygenase gene, complete cds. | C40201 | artifact-warning sequence (translated ALU class C) - human | 4.4e-15 | | | 0.49 |
| SI.15317 | U29895 | Human 4-hydroxyphenylpyruvate-dioxygenase gene, complete cds. | A46010 | X-linked retinopathy protein (C-terminal, clone XE11 8c) - human (fragment)>GP:SS8722_1 X-linked retinopathy protein [3' region, clone XE11:8c] [human, mRNA Partial, 390 nt]. This sequence comes from fig. 5 | 5.1e-09 | | | 0.070 |
| SI.155m13 | Z99286 | Caenorhabditis elegans cosmid Y7A9C, complete sequence. | POLG_PRSVII | GENOME POLYPROTEIN (CONTAINS: N-TERMINAL, PROTEIN; HELPER COMPONENT PROTEINASE (EC 3.4.22.-) (HC-PRO); 42-50 KD PROTEIN; CYTOPLASMIC INCLUSION PROTEIN (CI); 6 KD PROTEIN; NUCLEAR INCLUSION PROTEIN A (NI-A) (EC 3.4.22.-) (49K PROTEINASE)) (49 | 0.016 | | | 1.0 |
| SI.157m13 | U91321 | Human Chromosome 16 BAC clone C11987SK-A-363f6, complete sequence. | ALU1_HUMAN | !!! ALU SUBFAMILY J WARNING ENTRY !!! | 6.0e-26 | | | 4.5e-11 |

TABLE 2

| Seq. Name and/or Other Seq. Name | BlastN vs. Gib (nearest neighbor) | | BlastX vs. NRI'dl. (nearest neighbor) | | P(V) | Accession | Hit Description | Hit Description | P(V) |
|--|-----------------------------------|--|---------------------------------------|--------------------|----------------------|------------|-----------------|---|------------------|
| | Accession | | | | | | | | |
| SI 16017 | <NONE> | <NONE> | <NONE> | <NONE> | <NONE> | C334_HUMAN | | PROCOLLAGEN ALPHA 3(IV) CHAIN PRECURSOR>PIR1:CGHU3B collagen alpha 3(IV) chain precursor, long splice form - human>GPN:HSCOL4A3_1 Hsapiens COL4A3 mRNA; Type IV collagen alpha 3 chain>GP:HSCOL4A3_1 Hsapiens COL4A3 mRNA; Type IV collagen alp | 0.99 |
| SI 16217 WI:97.13.17 | X58263 | Mouse microsatellite marker DNA D4S116b. 4. | | 0.0029 | PRF1_LYCES | | | 36.4 KD PROLINE-RICH PROTEIN>PIR2:S19129 proline-rich protein TPRP-F1 - tomato>GP:LETPRPF1_1 L.; esculentum TPRP-F1 gene for a proline rich protein | 0.99 |
| SI 16917 SI 17417 | AC004687 | *** SEQUENCING IN PROGRESS clone hRPC 1171_1_10; ITGS phase 1, 4 unordered pieces | | 2.5e-11 <NONE> | <NONE> A54895 | | | <NONE> mucin2, intestinal/tracheal - rat (fragment) | <NONE> 0.13 |
| SI 176ml3 SI 17617 | 773424 783119 | Caenorhabditis elegans cosmid C44B9, complete sequence Caenorhabditis elegans cosmid R051110, complete sequence | | 0.00084 0.38 | <NONE> <NONE> | | | <NONE> <NONE> | <NONE> <NONE> |
| SI 177ml3 SI 17717 | AI022279 AC002416 | Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y43F11; ITGS phase 1, Human Chromosome X, complete sequence | | 0.00004 1.8e-17 | ANX7_BOVIN <NONE> | | | ANNEXIN VII (SYNEXIN) (FRAGMENT)>PIR2:A27695 synexin - bovine (fragment) | 0.0018 <NONE> |
| SI 179ml3 | AF039052 | Caenorhabditis elegans cosmid T22D1. | | 0.030 | CMU23045_8 | | | Cepaea nemoralis complete mitochondrial genome; ATPase subunit 8>GP:CMU23045_8 Cepaea nemoralis complete mitochondrial genome; ATPase subunit 8 | <NONE> 0.98 |

TABLE 2

PATENT

| Seq. Name and/or Other Seq. Name | BlastN vs. Gb (nearest neighbor) | | BlastX vs. NRPdb (nearest neighbor) | | P(V) | Hit Description | P(V) |
|--|----------------------------------|--|-------------------------------------|---|-------|-----------------|--------|
| | Accession | Hit Description | Accession | Hit Description | | | |
| SI.17917 | 1.41631 | Mus musculus glucokinase gene, complete cds. | <NONE> | <NONE> | 0.017 | <NONE> | <NONE> |
| SI.181ml3 | 798867 | Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1. | PS0245 | hypothetical protein (cpcG4 region) - Anabaena sp. (strain PC7120) (fragment)>GIP:ANARODCORA_6 Anabaena sp: cpcF gene, 3' end; cpcG1, cpcG2, cpcG3, and cpcG4 genes, complete cds; and unknown ORF, 3' end | 0.017 | | 0.99 |
| SI.18107 | 798867 | Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1. | PS0245 | hypothetical protein (cpcG4 region) - Anabaena sp. (strain PC7120) (fragment)>GIP:ANARODCORA_6 Anabaena sp: cpcF gene, 3' end; cpcG1, cpcG2, cpcG3, and cpcG4 genes, complete cds; and unknown ORF, 3' end | 0.018 | | 0.99 |
| SI.191ml3 | 798867 | Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1. | <NONE> | <NONE> | 0.019 | <NONE> | <NONE> |
| SI.195ml3 | AC004626 | *** SEQUENCING IN PROGRESS *** Homo sapiens chromosome #16q12.1+16q22/23+1q11/12 BAC clone CTT987SK-A-427110; HTGS phase 1, 15 unordered pieces. | HSU55091_1 | Human isolate JIR015 T cell receptor V-beta complementarity determining region 3 mRNA, partial cds | 0.050 | | 1.0 |
| SI.19517 | AC004626 | *** SEQUENCING IN PROGRESS *** Homo sapiens chromosome #16q12.1+16q22/23+1q11/12 BAC clone CTT987SK-A-427110; HTGS phase 1, 15 unordered pieces. | S54078 | probable membrane protein YPR056w - yeast (Saccharomyces cerevisiae)>GIP:SC9499X_12 Saccharomyces chromosome XVI cosmid 9499; Unknown; U19499; 12, unknown, len:338, CAl: 0; 12, similar to S44455, transcription factor BTF2 chain p34, (29; 3% identit | 0.053 | | 0.64 |

PATENT

TABLE 2

| Seq. Name and/or Other Seq. Name | BlastN vs. Cb (nearest neighbor) | | BlastX vs. NRPdb (nearest neighbor) | | P(V) | Accession | Hit Description | P(V) |
|--|----------------------------------|--|-------------------------------------|--|---------|------------|--|---------|
| | Accession | Hit Description | | | | | | |
| SI 197m13 | AF003114 | Caenorhabditis elegans cosmid ZC581 | | | 0.99 | <NONE> | <NONE> | <NONE> |
| SI 19717 | U43400 | Human herpesvirus-7 (HHV7) J1, complete virus genome. | | | 0.99 | <NONE> | <NONE> | <NONE> |
| SI 1917 | V00073 | Sindbis virus sequence complementary to 26S messenger RNA. | | | 3.2e-09 | <NONE> | <NONE> | <NONE> |
| SI 201m13 | AB001684 | Chlorella vulgaris C-27 chloroplast DNA, complete sequence. | | | 0.0013 | SIU05069.1 | Simian immunodeficiency virus SIVRIH543 clone 5-4 envelope glycoprotein (env) gene, V1 region, partial cds | <NONE> |
| SI 20117 | AB001684 | Chlorella vulgaris C-27 chloroplast DNA, complete sequence. | | | 0.0014 | HUMLTBP.1 | Homo sapiens (clone H44) latent transforming growth factor-beta binding protein (LTBP-II) gene, partial cds; Latent transforming growth factor-binding protein | 1.0 |
| SI 204m13 | Z49910 | Caenorhabditis elegans cosmid F44G4, complete sequence. | | | 1.0e-11 | CEI44G4.1 | Caenorhabditis elegans cosmid F44G4, complete sequence; F44G4; Similarity to 35:1KD hypothetical yeast protein (Swiss Prot accession number P38805); cDNA EST CEMSE65F comes from this | 5.0e-72 |
| SI 20417 | Z49910 | Caenorhabditis elegans cosmid F44G4, complete sequence. | | | 9.3e-12 | CEI44G4.1 | Caenorhabditis elegans cosmid F44G4, complete sequence; F44G4; Similarity to 35:1KD hypothetical yeast protein (Swiss Prot accession number P38805); cDNA EST CEMSE65F comes from this | 2.3e-71 |
| SI 28m13 | <NONE> | <NONE> | | | <NONE> | <NONE> | <NONE> | <NONE> |
| SI 2817 | Z84469 | Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 390013; HTGS phase 1. | | | 2.9e-53 | <NONE> | <NONE> | <NONE> |

PATENT

TABLE 2

| Seq. Name and/or Other Seq. Name | BlastN vs. Cb (nearest neighbor) | | BlastX vs. NRI (cb nearest neighbor) | | P(V) |
|--|----------------------------------|---|--------------------------------------|--|---------|
| | Accession | Hit Description | Accession | Hit Description | |
| SI_29m13 | AC004465 | Homo sapiens 12q24 PAC RPC13-363118 (Roswell Park Cancer Institute Human PAC library) complete sequence. | MCRA_METFE | METHYL-COENZYME M REDUCTASE ALPIA SUBUNIT (EC 1.8.-.-) >GP-MEFMCR5 M; fervidus methyl coenzyme M reductase component C genes mcrA, mcrB, mcrC, mcrD, and mcrG, complete cds; Methyl coenzyme M reductase alpha subunit | 0.95 |
| SI_29i7 | AC004465 | Homo sapiens 12q24 PAC RPC13-363118 (Roswell Park Cancer Institute Human PAC library) complete sequence. | MCRA_METFE | METHYL-COENZYME M REDUCTASE ALPIA SUBUNIT (EC 1.8.-.-) >GP-MEFMCR5 M; fervidus methyl coenzyme M reductase component C genes mcrA, mcrB, mcrC, mcrD, and mcrG, complete cds; Methyl coenzyme M reductase alpha subunit | 0.97 |
| SI_4M13 | D42085 | Human mRNA for KIAA0095 gene, complete cds. | HUMKIAAP_1 | Human mRNA for KIAA0095 gene, complete cds; KIAA0095 gene is related to Saccharomyces NIC96 gene | 3.6e-12 |
| SI_54m13 | Z68694 | Human DNA sequence from cosmid c11771:8, between markers DXS366 and DXS87 on chromosome X. | HUMF8L1A_1 | Human factor VIII gene 1.1 element insertion DNA; Unknown protein; ORF; putative | 1.2e-12 |
| SI_61i7 | AB001684 | Chlamydia vulgaris C-27 chloroplast DNA, complete sequence. *** SEQUENCING IN PROGRESS *** Plasmodium falciparum 3D7 chromosome 12 pYAC812 genomic sequence; HTGS phase 1, 26 unordered pieces. *** SEQUENCING IN PROGRESS *** Plasmodium falciparum 3D7 chromosome 12 pYAC293 genomic sequence; HTGS phase 1, 18 unordered pieces. | AF04841_1 | Homo sapiens CDO mRNA, complete cds; Immunoglobulin superfamily member; contains fibronectin type III-like domain | 1.0 |
| SI_62i7 | AC004153 | | <NONE> | <NONE> | <NONE> |
| SI_68m13 | AC004157 | | <NONE> | <NONE> | <NONE> |

TABLE 2

| BlastN vs. Gb (nearest neighbor) | | | BlastX vs. NRPdb (nearest neighbor) | | | |
|--|-----------|---|-------------------------------------|------------|--|--------|
| Seq. Name and/or Other Seq. Name | Accession | Hit Description | P(V) | Accession | Hit Description | P(V) |
| SI 6817 | AJ226619 | Ciona intestinalis genomic fragment, clone 17H6, genomic survey sequence | 0.064 | <NONE> | <NONE> | <NONE> |
| SI 6917 | Z22789 | H.sapiens CACGT repeat polymorphism sequence. | 1.9e-22 | AE001779_2 | Borrelia burgdorferi (section 65 of 70) of the complete genome; Competence protein I; putative; Similar to GB:M59751 SP:P31773 PID:1573409 percent identity: 27.00; identified by sequence | 1.0 |
| SI 6917 | AI010138 | Plasmodium falciparum DNA *** SEQUENCING IN PROGRESS *** from contig 3-66, complete sequence. | 0.21 | AE001779_2 | Borrelia burgdorferi (section 65 of 70) of the complete genome; Competence protein I; putative; Similar to GB:M59751 SP:P31773 PID:1573409 percent identity: 27.00; identified by sequence | 1.0 |
| SI 7513 | AC002536 | Human Chromosome 11 p11 pD11075120, complete sequence. | 1.0 | BTRNAT3_1 | B.taurus mRNA for complete thrombospondin | 0.0074 |
| SI 7717 | AF012886 | Buchnera aphidicola UDP-N- acetylglutamate; L-alanine ligase (mmC157), D-alanine; D-alanine ligase (ddlB), cell division protein (ftsA), cell septation protein (ftsZ), and pls genes, complete cds. | 0.40 | <NONE> | <NONE> | <NONE> |
| SI 8613 | Z69790 | Caenorhabditis elegans cosmid E33C8, complete sequence. | 0.020 | <NONE> | <NONE> | <NONE> |
| SI 8617 | U39368 | Acanthamoeba sp. 16S ribosomal RNA gene, mitochondrial gene encoding mitochondrial RNA, partial sequence. | 0.054 | <NONE> | <NONE> | <NONE> |
| SI 9013 | <NONE> | <NONE> | <NONE> | <NONE> | <NONE> | <NONE> |
| SI 9413 | X95276 | P. falciparum complete gene map of plastid-like DNA (IR-B). | 0.0096 | SHORE 1 | Shigella sonnei DNA for 26 ORFs, complete cds; ORF1 | 0.15 |

PATENT

TABLE 2

| Seq. Name and/or Other Seq. Name | BlastN vs. Gb (nearest neighbor) | | BlastX vs. NRPdb (nearest neighbor) | | P(V) | Hit Description | P(V) |
|--|----------------------------------|--|-------------------------------------|---|---------|-----------------|---------|
| | Accession | Hit Description | Accession | Hit Description | | | |
| SI 9417 | AI.022313 | Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 1119A7; HTGS phase I. | A46010 | X-linked retinopathy protein (C-terminal, clone XEH.8c) - human (fragment)>GP:SS8722_1 X- linked retinopathy protein [3' region, clone XEH.8c] (human, mRNA Partial, 390 nt); This sequence comes from Fig. 5 | 6.0e-18 | | 5.7e-07 |

CLAIMS

WE CLAIM:

1. A method of diagnosing cancer, tumor progression, hyperproliferative cell growth or accompanying biological and physical manifestations comprising:
 - (a) providing a polynucleotide probe that comprises a sequence capable of hybridizing to any one of the sequences shown in SEQ ID NO:1-339 or complement thereof;
 - (b) contacting a biological sample for diagnosis with said probe under hybridizing conditions that permit formation of a duplex; and
 - (c) determining the presence of said duplex.
2. The method of claim 1, wherein said polynucleotide probe comprises at least eight contiguous nucleotides of any of SEQ ID NO:1-339 or complement thereof.
3. The method of claim 2, wherein said polynucleotide probe comprises 8 contiguous nucleotides of the sequences of the clones selected from the group consisting of SL-5, SL-6, SL-9, SL-11, SL-13, SL-68, SL-69, SL-86, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, SL-177, SL-195, and SL-197.
4. A method of diagnosing cancer, tumor progression, or hyperproliferative cell growth comprising:
 - (a) providing an antibody capable of binding to a polypeptide encoded by any one of SEQ ID NO:1-339 or complement thereof;
 - (b) contacting a biological sample for diagnosis with said antibody under binding conditions that permit formation of an antibody-polypeptide complex; and
 - (c) determining the presence of said complex.
5. The method of claim 4, wherein said antibody is capable of binding to a polypeptide comprising at least six contiguous amino acid of a polypeptide encoded by any one of SEQ ID NO:1-339 or complement thereof.

6. The method of claim 5, wherein said polypeptide comprises at least six contiguous amino acids of a polypeptide encoded by any one the sequences of the clones selected from the group consisting of SL-5, SL-6, SL-9, SL-11, SL-13, SL-68, SL-69, SL-86, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, SL-177, SL-195, and SL-197.

7. A diagnostic kit comprising:

(a) a diagnostic reagent comprising a polynucleotide probe that comprises a sequence capable of hybridizing to any one of SEQ ID NO:339 or complement thereof when said sequence is present in a test biological sample;

(b) a normal biological sample; and

(c) instructions for detecting differences that exist between the levels of duplexes in said test biological sample as compared to said normal biological sample.

8. A method of treating a mammal with cancer, tumor progression, hyperproliferative cell growth or accompanying biological and physical manifestations, said method comprising administering to said mammal a composition that comprises a therapeutically effective amount of a polynucleotide comprising a sequence capable of hybridizing under stringent conditions to any one of SEQ ID NO:1-339 or complement thereof.

9. The method of claim 8, wherein said polynucleotide comprises at least eight contiguous nucleotides of any of SEQ ID NO:1-339 or complement thereof.

10. The method of claim 9, wherein said polynucleotide is an antisense construct.

11. The method of claim 9, wherein said polynucleotide is a ribozyme construct.

12. An isolated polynucleotide selected from the group consisting of:
- (a) a polynucleotide comprising the nucleotide sequence of any one of SEQ ID NO:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;
- (b) a polynucleotide encoding a variant of the polypeptide encoded by (a);
- and
- (c) a polynucleotide encoding a protein expressed by a polynucleotide having the sequence of at least one of sequences of (a).
13. A vector comprising the polynucleotide of claim 12.
14. A host cell comprising the vector of claim 13.
15. A composition comprising a polypeptide, wherein the polypeptide is selected from the group consisting of:
- (a) a polypeptide encoded by any one of the polynucleotides of claim 12,
- and
- (b) a variant of the polypeptide of (a).

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Sequence Range: 1 to 1383

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      10      20      30      40      50      60
TTA CTC ACT ATA GGG CTC GAG CGG CCG CCC GGG CAG GTG TAA AAA TAA AAT GAC AGT TTG AAC ATA
AAT GAG TGA TAT CCC GAG CTC GCC GGC GGG CCC GTC CAC ATT TTT ATT TTA CTG TCA AAC TTG TAT
<E S Y P E L P R G P L H L F L I V T Q V Y

      70      80      90      100      110      120      130
CAA AAC CCA CCC CAT TCC TAT AGA GCC TAG TAC TAC ACT ACC CCC TCC CAA CTT TAG CCT CCA CAT
GTT TTG GGT GGG GTA AGG ATA TCT CGG ATC ATG ATG TGA TGG GGG AGG GTT GAA ATC GGA GGT GTT
<L V W G M G I S G L V V S G G G L K L R W M

      140      150      160      170      180      190
ATA GTA ATG TGC TTG GAA CAC AAA AAA CAC TTC ATA AAT TGT GCT GAA TGA AAT CAT TTC CAT GAG
TAT CAT TAC ACG AAC CTT GTG TTT TTT GTG AAG TAT TTA ACA CGA CTT ACT TTA GTA AAG GTA CTC
<Y Y H A Q F V F F V E Y I T S F S I M E M

      200      210      220      230      240      250      260
TGT TTA TGG ATT TTG AGT TCA TTT GTA CCT TTT ACC TAA AAT TCT AGC CAC TTT AAT TTG GAG AGT
ACA AAT ACC TAA AAC TCA AGT AAA CAT GGA AAA TGG ATT TTA AGA TCG GTG AAA TTA AAC CTC TCA

      270      280      290      300      310      320      330
TTC CAG AGC AAA GGA CCT TTT ACC TAA AAT TCT AGC CAC TTT AAT TTG GAG AGT TTC CAG AGC AAA
AAG GTC TCG TTT CCT GGA AAA TGG ATT TTA AGA TCG GTG AAA TTA AAC CTC TCA AAG GTC TCG TTT

      340      350      360      370      380      390
GGG CAC AGA TCC CAG GCA TAA CAA CGC TTT GCG TAT ACA GCA ACC AAT ATC TTG TCA ACC CAA GAA
CCC GTG TCT AGG GTC CGT ATT GTT GCG AAA CGC ATA TGT CGT TGG TTA TAG AAC AGT TGG GTT CTT

      400      410      420      430      440      450      460
AGT TCC TCC ATT GAT ACC TAG TAG AAA TAG CCC AGT TTT TAA AGT CCT CAA AAC TGT AAC AAA TTA
TCA AGG AGG TAA CTA TGG ATC ATC TTT ATC GGG TCA AAA ATT TCA GGA GTT TTG ACA TTG TTT AAT

      470      480      490      500      510      520
CTT GTT TTT AAA ATT TAA CTT AAA TTA ATA CAA TCA GAT TTT TGT GTT ATT TGG GTA TTA GAG TAT
GAA CAA AAA TTT TAA ATT GAA TTT AAT TAT GTT AGT CTA AAA ACA CAA TAA ACC CAT AAT CTC ATA

      530      540      550      560      570      580      590
GTT AAA GCA CAT ATA TCC CAG AGA CAT AGA GTT TCC GTT TCA AAA AGT CAT GCA TTC ATG TGT GCT
CAA TTT CGT GTA TAT AGG GTC TCT GTA TCT CAA AGG CAA AGT TTT TCA GTA CGT AAG TAC ACA CGA

      600      610      620      630      640      650      660
AAT GAC AAT CCT ATC CTG ACC CGC TAT GTG ACT TGT ATC TCT AAA CCA TAG GCT TTC CTG AAT TTT
TTA CTG TTA GGA TAG GAC TGG GCG ATA CAC TGA ACA TAG AGA TTT GST ATC CGA AAG GAC TTA AAA

      670      680      690      700      710      720
ATC TGT TAA TTT AAC CCT GAT TTC TCA GCA GCA GCT TCT CTT TGT AAA TAG ACT TGC CTC TTC TGT
TAG ACA ATT AAA TTG GGA CTA AAG AGT CGT CGT CGA AGA GAA ACA TTT ATC TGA ACG GAG AAG ACA

      730      740      750      760      770      780      790
GTC TGA CCT CTG CTC CTC ATA ATC AGA TTA ACT CAG ATA AAG CTG CTT CAG GGA AGA GGT CAA AAC
CAG ACT GGA GAC GAG GAG TAT TAG TCT AAT TGA GTC TAT TTC GAC GAA GTC CCT TCT CCA GTT TTG

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FIG. 1A

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      800      810      820      830      840      850
CGT TGC CAA AAA TAG TAG TTG CCC TAC TTC AGT CTA TTT TCA ACA GAG TAG CCA GGA GAT CCT GTT
GCA ACG GTT TTT ATC ATC AAC GGG ATG AAG TCA GAT AAA AGT TGT CTC ATC GGT CCT CTA GGA CAA

860      870      880      890      900      910      920
CAC ACC AAA GTC CAA TCA GCC CTA CTG TTA GCA CTC TGC TCA CAA GCC TCC AGT GGC TTC CGA CCT
GTG TGG TTT CAG GTT AGT CCG GAT GAC AAT CGT GAG ACG AGT GTT CCG AGG TCA CCG AAG GCT GGA

      930      940      950      960      970      980      990
CAC TCA CAG TAA AAG CCA AGT CAT CCT TTA GCC TAT GAT GTC CTA CAT GAT TTG AAT TCC CTT CCA
GTG AGT GTC ATT TTC GGT TCA GTA GGA AAT CCG ATA CTA CAG GAT GTA CTA AAC TTA AGG GAA GGT

      1000     1010     1020     1030     1040     1050
TTG ATT TTT GTC ACT GAT TTT TAA AAA TCC AAA TTC ATT CTC ATA CAG CTG AAT TGT CCT CTT TGC
AAC TAA AAA CAG TGA CTA AAA ATT TTT AAG TTT AAG TAA GAG TAT GTC GAC TTA ACA GGA GAA ACG

      1060     1070     1080     1090     1100     1110     1120
TTT AAG TAT GCC AGG ATT ATT TCT ACC TCA GGG CCT TTG CAC TTG ATA TTC CCT TCA CCT TTT CCA
AAA TTC ATA CCG TCC TAA TAA AGA TGG AGT CCC GGA AAC GTG TAT AAG GGA AGT GGA AAA GGT

      1130     1140     1150     1160     1170     1180
AGA TAG TTA TTC CCT CAC CTC AGT CAA GCC TTT ATT TAG ATG CCC CCT TCT CAT CAA GGC ATT CTC
TCT ATC AAT AAG GGA GTG GAG TCA GTT CCG AAA TAA ATC TAC GGG GGA AGA GTA GTT CCG TAA GAG

1190     1200     1210     1220     1230     1240     1250
TGA TCT CCT TAT TTA AAT GTA TGA CAC CCC TTC TTT GCT TTA CAT TTA ATC AGA ACA TGT GTC ACT
ACT AGA GGA ATA AAT TTA CAT ACT GTG GGG AAG AAA CGA AAT GTA AAT TAG TCT TGT ACA CAG TGA

      1260     1270     1280     1290     1300     1310     1320
ATC TAG CAT ATA ATA CAT TTG CTT GAC CTC TTT TGT TTA CTG TCT ATG CCT CCT GAA TAC TGT GTA
TAG ATC GTA TAT TAT GTA AAC GAA CTG GAG AAA ACA AAT GAC AGA TAC GGA GGA CTT ATG ACA CAT

      1330     1340     1350     1360     1370     1380
AGC TCC ACG ATA CAG GCA CTT TTC TCT ATT TCG AGC ACT GTT GTA TTA CAG AGC CTT AAA
TCG AGG TGC TAT GTC CGT GAA AAG AGA TAA AGC TCG TGA CAA CAT AAT GTC TGC GAA TTT

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FIG. 1B

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Sequence Range: 1 to 1815

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      10      20      30      40      50      60
ACT TTT TGT TCA TTT TGA TTT TTG GAT AAT GCA AAA TTA TAG ATT TTT TAA AAA TTA TAT TCA AAG
AAA ACA AGT AAA ACT AAA AAC CTA TTA CGT TTT AAT ATC TAA AAA ATT TTT AAT ATA AGT TTC TTA

      70      80      90      100      110      120      130
AAT ACT GAG TGC AAG ACA ATC TTT CTA GGT TAA AAA ATA TCT TAT AAA CCT GAA TTG TCA ATT ATT
CTC ACG TTC TGT TAG AAA GAT CCA ATT TTT TAT AGA ATA TTT GGA CTT AAC AGT TAA TAA TAA CAT

      140      150      160      170      180      190
ATT GTA TCC CAG ATG TAT GGA AGT TAA TGG ATA GTC AGT AAC ATA CAG GAC TAG CAG AAG GTT TGT
TGA TGA AGG GTC TAC ATA CCT TCA ATT ACC TAT CAG TCA TTG TAT GTC CTG ATC GTC TTC CAA ACA

200      210      220      230      240      250      260
TGT TAT AGG TAA TCT GGA GAG AAG CCA GGT AAG TGG AAT TTG GGA TTT GCT GCT GTT GCC AGA AAG
ACA ATA TCC ATT AGA CCT CTC TTC GGT CCA TTC ACC TTA AAC CCT AAA CGA CGA CAA CGG TCT TTC

      270      280      290      300      310      320      330
CAG CAC AGA GAC ATG GTA AGT GGC AAG ACC CAG GTA ACT AAA ACA ACC ATG TCT TAG TCC TTT TAT
GTC GTG TCT CTG TAC CAT TCA CCG TTC TGG GTC CAT TGA TTT TGT TGG TAC AGA ATC AGG AAA ATA

      340      350      360      370      380      390
GCT GCT GTA ACA GAA TAT CAC AGA CTG AGT AAT TTA TAA TGA ACA GAA CTT TAT TTG TCT TCT GGT
CGA CGA CAT TGT CTT ATA GTG TCT GAC TCA TTA AAT ATT ACT TGT CTT GAA ATA AAC AGA AGA CCA

      400      410      420      430      440      450      460
TCT GGA GAC TGG GAA ATC TAA GAG CGT GGC ATT GAC ATA TGG TGA GGG CAT TTS TGC CTC ATC ATC
AGA CCT CTG ACC CTT TAG ATT CTC GCA CCG TAA CTG TAT ACC ACT CCC GTA AAC ACG GAG TAG TAG

      470      480      490      500      510      520
CCA TGA CAG AAG ATG GAA ATG CAA GAG AGC TCA AAA GCA AGA GAG CAA ATG GGG CCA AAC TTG CTT
GGT ACT GTC TTC TAC CTT TAC GTT CTC TCG AGT TTT CGT TCT CTC GTT TAC CCC GGT TTG AAC GAA

530      540      550      560      570      580      590
TTT ATA ACA AGC CAC TCT TGT GAT AAT GAA CCA ACT CAA ATA AAG ACA TAA ATC CAT TCA TGA
AAA TAT TGT TCG GTG AGA ACA CTA TTA CTT GGT TGA GTT TGT TAT TTC TGT ATT TAG GTA AGT ACT

      600      610      620      630      640      650
GGG CAG AGC CCT CAA GGA TGA ATC ACT TCA CTT CTT A ATG GCC TCA GCT TCT AAT ACC ATC ACA
CCC GTC TCG GGA GTT CCT ACT TAG TGA AGT GAA GAA T TAC CGG AGT CGA AGA TTA TGG TAG TGT
                                     M A S A S N T I T

      660      670      680      690      700      710      720
ATA GTA ATT CAG TTT CAA CAT GGG TTT TAT AGG GAC GTT GGA ACC ACA GCA AAC TGT AAC CAT TTT
TAT CAT TAA GTC AAA GTT GGA CCC AAA ATA TCC CTG CAA CCT TGG TGT CGT TTG ACA TTG GTA AAA
I V I Q F Q H G F Y R D V G T T A N C N H F>

      730      740      750      760      770      780      790
GAT TTC CTT ATT TGC ACC ATT TTA AAA AAA CCT ATT TAT TTA ACG ACT GTT TAT TCA GTG CCT ATT
CTA AAG GAA TAA ACG TGG TAA AAT TTT TTT GGA TAA ATA AAT TGC TGA CAA ATA AGT CAC GGA TAA
D F L I C T I L K K P I Y L T T V V S V P I>

      800      810      820      830      840      850
CTG TTG TGT TGG GSA CTA GAG GTA ATT ACA AAG GSA ATA AGA CAA ACA GTC ACC CAC TCT GGT GAT
GAC AAC ACA ACC CCT GAT CTC CAT TAA TGT TTC CTT TAT TCT GTT TGT CAG TGG GTG AGA CCA CTA
L L C W G L E V I T K S I R Q T V T H S G D>

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FIG. 2A

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      860      870      880      890      900      910      920
GCT TCC CTT ATC TTC ATA ATG CAT TTG ATC CTG TG ATT CTT TGG CAC ATG AGT CCA TTG CAT CTT
CGA AGG GAA TAG AAG TAT TAC GTA AAC TAG GAC AC TAA GAA ACC GTG TAC TCA GGT AAC GTA GAA
  A   S   L   I   F   I   M   H   L   I   L>

      930      940      950      960      970      980
GCA TAT TAG TGT CCA GTA AGT TTT TCC TGA CCA ATT GAT AAT ATA GAT ATA CAT TGG TAG CAG TTT
CGT ATA ATC ACA GGT CAT TCA AAA AGG ACT GGT TAA CTA TTA TAT CTA TAT GTA ACC ATC GTC AAA

      990      1000      1010      1020      1030      1040      1050
TGT GTA TAT TTT TAT AGT TAG ATG TTG TTG GCA CAT GTG ACT TGT GTC TCA GAA AAA TAC AGA AAA
ACA CAT ATA AAA ATA TCA ATC TAC AAC AAC CGT GTA CAC TGA ACA CAG AGT CTT TTT ATG TCT TTT

      1060      1070      1080      1090      1100      1110
TGG TTA AAG ACA GGA GGA TAC TAC CCT GAT TTC TCT GTT CAT TAA AGA ACA GCT ATT TGG GGG GAA
ACC AAT TTC TGT CCT CCT ATG ATG GGA CTA AAG AGA CAA GTA ATT TCT TGT CGA TAA ACC CCC CTT

      1120      1130      1140      1150      1160      1170      1180
AAC CTG ATA CAA TTA TTT GAG CAT GTG GCT TAA AGA TTA GAC CTA TAA ACA ATT CAG GAG CAT
TTG GAC TAT GTT AAT AAA CTC GTA CAC CGA ATT TCT AAT CTG GAT ATT TGT TAA GTC CTC GTA

      1190      1200      1210      1220      1230      1240
CTT CCA GCA AAC TGT GTG AGA ATT CAC AGA AAT AAA CCT GGT AGG TTT GTG CTA TGT TAT TCA CAT
GAA GGT CGT TTG ACA CAC TCT TAA GTG TCT TTA TTT GGA CCA TCC AAA CAC GAT ACA ATA AGT GTA

      1250      1260      1270      1280      1290      1300      1310
GGG CTG TTA ACT CTT TTC CAT TCC TAG GTC CTT TAT TTC CCT GCC CTC CTC AAT CTC ATG CTC TTG
CCC GAC AAT TGA GAA AAG GTA AGG ATC CAG GAA ATA AAG GGA CGG GAG GAG TTA GAG TAC GAG AAC

      1320      1330      1340      1350      1360      1370
AGA TTT TTA ACT ATA TTA CTT CTT TAC AAA GTC ATC TTC AAA ATG ATT CAT TTT GGA TAG CAA
TCT AAA AAT TGA TAT AAT GAA GAA ATG TTT CAG TAG AAG TTT TAC TAA GTA AAA CCT ATC GTT

```

FIG. 2B

5/5

SL5 IMMUNOHISTOCHEMISTRY COMPARISON OF TUMOR vs. NORMAL

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------|----------|----------|----------|---------|-----------|----------|------------|------------|------------|-----------|
| A | Adrenal | Adrenal | Adrenal | Ovary | Ovary | Ovary | Ovary | Breast | Breast | Breast |
| Tumor | (+4) | (+4) | (+2) | (+4) | (+4) | (+4) | (+4) | na | (+4) | (+1) |
| NC | (-) | (-) | (-) | wp | (-) | (-) | (-) | na | (-) | (-) |
| Normal | (+2) | (+2) | (+2) | (+1) | (+1) | na | | (+1) | na | na |
| NC | (-) | (-) | (-) | (-) | (-) | na | | (-) | na | na |
| B | Colon | Colon | Colon | Colon | Prostate | Prostate | Prostate | Prostate | Uterus | Cervical |
| Tumor | (+4) | (+4) | (+4) | (+4) | (+2) | (+3) | (+3) | (+3) | (+4) | (+2) |
| NC | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) |
| Normal | (+2) | (+1) | (+2) | (+3) | ? | (+2) | (+1) | (+2) | (+2) | (+2) |
| NC | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) |
| C | Kidney | Kidney | Kidney | Kidney | Pancreas | Pancreas | Pancreas | Pancreas | Leiomyo- | Leiomyo- |
| Tumor | (+4) | (+4) | (+4) | (+4) | (+4) | (+4) | (+4) | (+4) | (+4) | (+4) |
| NC | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | EDG | EDG |
| Normal | ? | ? | | | (+1) | (+1) | (+2) | (+1) | | |
| NC | (-) | (-) | | | (-) | (-) | (-) | (-) | | |
| D | Liver | Liver | Liver | Stomach | Stomach | Stomach | Lymphoma | Lymphoma | Lymphoma | Lymphoma |
| Tumor | (+4) | (+4) | (+4) | (-) | na | na | (+4) | (+2) | (+2) | (+1) |
| NC | (-) | (-) | (-) | (-) | na | na | (-) | (-) | (-) | (-) |
| Normal | na | na | na | na | na | na | (+1) | (+1) | ? | (-) |
| NC | na | na | na | na | (-) | (-) | (-) | na | (-) | (-) |
| E | Seminoma | Seminoma | Seminoma | Thyroid | Thyroid | Thyroid | Thyroid | Fibro- | Fibro- | Fibro- |
| Tumor | (+3) | (+4) | (+4) | (+4) | na | na | | (+4) | (+4) | (+4) |
| NC | (-) | (-) | (-) | EDG | wp | EDG | EDG | (-) | (-) | (-) |
| Normal | (+2) | (+1) | (+2) | (+1) | (+1) | (+2) | (-) | (-) | purk(+) | (+2) |
| NC | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | na |
| F | Melanoma | Melanoma | Melanoma | Chorio- | Carcinoid | Chorio- | Basal Cell | Basal Cell | Basal Cell | Germ Cell |
| Tumor | (+4) | (+4) | (+4) | (+4) | (+4)? | (+1) | (+3) | (+3) | (+1) | (+4) |
| NC | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | (-) | EDG |
| Normal | | | | | | | (+1) | (+1) | | (+1) |
| NC | | | | | | | (-) | (-) | | (-) |

FIG. 3

Staining Intensity: -, no staining; + weak; ++ medium; +++ strong staining

Staining Percentage: 1: 0-25%; 2: 26-50%; 3: 51-75%; 4: 76-100%

For example: (++) stands for 51-75% of cells have medium staining

NC: Negative Control; na: no tissue materials on slides

SEQUENCE LISTING

<110> Zhang, Jimmy
Astel, Jon H.
Carroll III, Eddie
Endege, Wilson O.
Ford, Donna M.
Monahan, John E.
Schlegel, Robert
Steinmann, Kathleen E.

<120> GENES AND GENE EXPRESSION PRODUCTS THAT
ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

<130> 200130.463

<140> US

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<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 1

| | |
|--|------|
| accgcctcgn atccctagta acggccgcga gtgtgctgga attcgccctt tcatgcctat | 60 |
| aatcccagca cttggggagg ccgaggatct cctctctggt ggatcacttg agggcaggag | 120 |
| ttaagagacc atcctggcca acatgatgaa accctgtctc tactaaaaat acaaaaagta | 180 |
| gctgggcgtg gtggcatact cttacaatcc cagctacttg ggaggctgag gcaggagaat | 240 |
| cacttgaacc taggaagcag aggttgcagt gggccaagat cacaccacta tactctagcc | 300 |
| tgggcgacag aggtggggaa aaaagtagga cccctgtcct atattcaggt tttctcaca | 360 |
| tatatgaacc catctaaatt ctacgttggt aaaggtagct taggttaatt agtctatact | 420 |
| tatttaagac caatatgggg tgagatggat tttttttta aaaatcctac agtaaggctt | 480 |
| tctactttcc ttctaagag gaaaaagggt acaaaaattc aagtgtcaat gtccccttcc | 540 |
| tgggaagagg tttagaaaaa caacagctca ccttctgaac tctaccagtt ccttttgaag | 600 |
| ttaacgaagc attaaaatca gatgtaaaaa aagaaaaaaa aaggcaggga aatatttaca | 660 |
| aaactggaca ttctttacag atatacaatc tlgctaatac tgggagaacc nttccaagga | 720 |
| tgtataaaga ggagacgnca ccttagtaat gccagggata gagaaaaccc nggatataat | 780 |
| atgggggttt taatgccgga acatggngga aactaggang agccgagatg ganctggtcc | 840 |
| ctgaagttaa ctggttnagn tattctgggn accctcagga gggccttgca agtgtgtggg | 900 |
| taggnaaaaa actgggcttg gcaaaactact tggntncaag tttttttatg ggagaccgaa | 960 |
| caacctggga aggcctaaan gcaagnggtt cgnctnttaa ttaaaaggct gggccaaatt | 1020 |
| accc | 1024 |

<210> 2

<211> 1024

<212> DNA

<213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

<400> 2

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|------|
| gccgtcnaga | cctgctcgag | cggacgtcng | tgcgatggat | ntactgcaga | nntctccctn | 60 |
| ncatccta | acgactcact | atagggcagt | gacgaaaggt | acnnccngga | ngnttnntgg | 120 |
| ntangcgatc | agctattgna | cggaatctct | gtganantga | nnagctnana | tcntctccan | 180 |
| ggaanaacag | ntccncaang | ctntattnga | gacagagcta | tgacannnnc | ntntntactc | 240 |
| ngacagtcct | taggaaccnc | gcaantgana | nngngnggat | gcnactagga | nctgncncnn | 300 |
| ntagngagcg | agcccgggtg | ataactgccc | tggtacncng | nagctgnaaa | gccgcctgca | 360 |
| gaccgaacct | gagactgacg | tcgcctcanc | tatngacnnn | nnnccnatnn | tgagtgnaag | 420 |
| cgtncnctatg | ngacactcgg | ggncacagat | gcanancgct | ancnncccn | ggngtgncan | 480 |
| tnagnnatcn | ttgncatcat | tnccnatntt | gacatgtgta | atgatngaga | tctcatannt | 540 |
| gcactgtgct | tctcatctat | taacgctaaa | ccatgacagt | ttnccttcat | tgccacntnc | 600 |
| tttcagtgac | ccnanatntt | atcgctanat | attcnatcct | tcaacngtag | cattnttctt | 660 |
| gctnttcttt | nccnaaagca | tcttctttcc | caactcactc | cagggccaaa | tactctcanc | 720 |
| cnnetcactn | tangntctcn | gntcacggtc | tttcccgtga | cacgtcattc | aattccccctc | 780 |
| gnaagctanc | ccaggcccaa | ctttnntctt | cttcaccggg | nntaacttaa | tcctggggga | 840 |
| aggnaangcn | nggntcttta | gccttgntcc | agaaccttng | gtagcccccg | ncacaaatcc | 900 |
| naaaaacctt | tgcaggtttg | ggggttgga | cccgggncct | tttttcccg | gtnggggtta | 960 |
| nggngggaac | cgnattttta | nnatngacca | aggaaggctg | gggtcctttg | gaaagncccc | 1020 |
| cngg | | | | | | 1024 |

<210> 3
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

<400> 3

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| cttggtaccg | agctcggatc | cctagtaacg | gccgccagtg | tgctggaatt | cgcccttcca | 60 |
| tcctaatac | actcactata | gggctcgagc | ggccgcccgg | gcaggtcact | gggtttttct | 120 |
| cctttttag | ccttttctct | tagtctctc | ttcccgggtg | ttggtaaaaa | gaggtgaatt | 180 |
| gacagcctat | ggtgaagaca | ctgtgctttt | ctcaagaagg | acatccaaac | agcaagtcta | 240 |
| cttctttctc | tttaacgatg | tgctcattat | caccaagaag | aagagtgaag | aaagttacaa | 300 |
| cgtcaatgat | tattccttaa | gagatcagct | attgggtgga | tcttgtgaca | atgaagagct | 360 |
| taattcttct | ccagggaaga | acagctccac | aatgctctat | tcaagacaga | gctctgccag | 420 |
| tcacctcttt | actctgacag | tccttagtaa | ccacgcgaat | gagaaagtgg | agatgctact | 480 |
| aggagctgag | acgcagagcg | agcgagcccc | ctggataact | gccctgggac | acagcagcgg | 540 |
| gaagccgcct | gcagaccgaa | cctcactgac | ccagggtgga | atcgttagg | catttactgc | 600 |
| taagcagcca | gatgaactct | ccctgcaggt | ggctgacgtc | gtcctcatct | atcaacgtgt | 660 |
| cagcgatggc | tggtatgagg | gggaacgact | acgagatgga | gaaagaagct | ggtttcttat | 720 |
| ggaatgtgcc | aaggagataa | catgtcaagg | ctacaattgn | ttaagaatgt | ggagagaatg | 780 |
| ggacgcttgc | taggactgga | gaanccacgt | gagncctttt | aangggcctt | tggtactgca | 840 |
| agaattgcac | cgacacttac | cgggcttggt | ggttctgggg | ctagtttaat | ggnaatttgg | 900 |
| cccagncttt | ttaattaaag | gaccggaaac | cntggccttt | aactttggcc | agtggtnccg | 960 |
| tntntnatgg | aaaaaacttt | gggtaccccc | gngttgccca | ggttagtttt | acctaacccc | 1020 |
| cccn | | | | | | 1024 |

<210> 4
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 4

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| accgnnctcg | natccctagt | aacggccgcc | agtgtgctgg | aattcgccct | tgtatagtgg | 60 |
| tgtgatcttg | gctcactgct | acctccacct | cccaggctca | cacgatcctc | cagcctcagc | 120 |
| ctcccaagta | gctgcgacta | caggtgcacg | ccattgcagc | tggttaattt | ttgtattttc | 180 |
| agtagagatg | gggtttcccc | atgttgacca | ggctggctct | gaactcctaa | gctcaagcaa | 240 |
| ttcacctgcc | tcagcctccc | agagtgtctg | gattactcct | aagctcaagc | aattcacctg | 300 |
| cctcagcctc | ccagagtgtg | gggattactc | ctaagctcaa | gcaattcatc | tgcttcagcc | 360 |
| tcccagagt | ctgggattac | tcctaaactc | aagcaattca | cctgcctcag | cctcccagag | 420 |
| tgctgggatt | actcctaagc | tcaagcaatt | cacctgcctc | agcctcccag | agtgtctggg | 480 |
| ttactcctaa | gctcaagcaa | ttcacctgcc | tcagcctccc | agagtgtctg | gattactcct | 540 |
| aagctcaagc | aattcacctg | cctcagcctc | ccagagtgtg | gggattacag | gtgtgaagca | 600 |
| ctacacccag | cccattcttc | ccttttaacc | aaggaagaaa | ttacacaatg | aaacaaatac | 660 |
| ccrcaatctt | aatatcactt | ttcctttgnc | ataattaaca | attagcgaca | cagaatcgag | 720 |
| gggaaaaaca | caggatccgt | ttacttctan | gaanggcgtt | tctgtgaatc | taagaagggg | 780 |
| ctttctctng | gtctcaagg | cacgggtcaa | gccaggtggg | ccgcttgccg | ggtgctgctg | 840 |
| ctggggagaa | acttntcggg | gatnggaagt | gaaannnggt | ccgntctggc | ccccttnttt | 900 |
| tgqgaaccc | caggngngtn | tngcaaaggc | caaggggaa | gcctcaagg | ggggcatgaa | 960 |
| ctttgnagct | tccaactttg | gttcctntan | acnngggggg | gccctnatgg | cccaaaaagg | 1020 |
| gctt | | | | | | 1024 |

<210> 5

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 5

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|------|
| gcccgtcnaga | cnctgtcngn | agcgnnccgnc | ngtgggatgg | nnanntgcng | annncgccc | 60 |
| tccttccctaa | tacnactcac | tataggcggn | agnggccacn | tcnagctngn | gnnngaagtt | 120 |
| ggntntgcngt | gnagtctgtg | cctgnggcag | cgcgctcatg | atgacttttg | gtcattgtctg | 180 |
| ctctccttgc | ctttagggga | gggtcctggt | gctctgtgag | cagattngac | cctaggggtg | 240 |
| aagtcactctn | gcccctgttc | tgagccgaga | gctggncagg | gngcgtctca | catcattcct | 300 |
| ctgcccctgt | ngncgcatgg | gaaatcctaa | acaggctctg | tggnaaangc | tgnnccaagg | 360 |
| cgccctctgg | gcagncganc | catcagnnng | tcgnnagccn | ngaancgatg | gcccgggaaa | 420 |
| accaaaccag | gaannaanca | caccgtgcga | aagggnattg | tgaacgaact | gaaaaattgt | 480 |
| aaagctctta | aggactttca | tgcttgcnag | nattnantga | canaaaatca | ctganncann | 540 |
| gaacataaag | aaatagccat | ggangattca | cagtgtanct | ngctgancng | ctcatntggc | 600 |
| cncaaggnat | gtttactna | cgnagncnca | atganctggt | ccttgntnng | gctggctttc | 660 |
| ttttctgngc | aaaacttgg | ggnccttaa | ttgggcttan | cccaacnaca | agacttcctg | 720 |
| ggaaaacngg | gnanntagga | antttgnaag | gacaacccaa | ggaaactgga | agggaaacaa | 780 |
| ttttttggtt | cccaaaaccg | ggccaagatt | gggcttcaaa | aancctttga | accngggggg | 840 |
| ncaattntnt | gggnttanat | cccccgaaag | gaanngggan | ggtnttnaag | gnaaaaancc | 900 |
| nnccaaggaa | ccnggtttt | gggcentgga | agggnccttg | gncnnggtt | cgaggntttg | 960 |
| nccttaactgg | aaggncnca | aagggaacac | cnnnnntttt | tnaagggnct | cccggaaacc | 1020 |
| aaag | | | | | | 1024 |

<210> 6

<211> 957

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(957)

<223> n = A,T,C or G

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<400> 6
acgcgggggac acacagaggc gggcatttcc ctgacgactc gtgtgtgccg tgggggagcg      60
gtagatggcc cagccccaag tgttccgac ttcctgccca aacatattct gtgacggaaa      120
gcctatgttg acctcgcccg gactcaagg cgtgggcagc ggcctaactg ctgctgcggg      180
aacacagtcg cgttgaatgc tattctcaag acagacaaaa cagtgggaag aactacgcc      240
aagctgctaa ctccctggcc attgccggac tctttcaccc ccatggactt tccgctggca      300
ttttaaacia catagtctct tttctctgtc tctttctctt tccctctctc tttctcttct      360
tctctctctc tctctctctc tctctctctc tctcaatctc ataatttctc tctctcgtgc      420
cacgttccca cccaacgctc tctcgccac ttctactggg gcccaacttc tctcctgctc      480
tctctgtctc aacgtgattg actttcttgt gctgcncagg acttcttgcc cacgtgcgcc      540
ttcaanacgg taaagagctg caactgaacg tgtgagacat ggtgcanata aggctgagag      600
ggcggngggg gagatgcccc tgaactcaag tacctgcccc ggcngggccg tcgaaagggg      660
gaattccagc aaactggcgg ccgttactan tggattcngc ctccgggtaca ngcttggggg      720
aatcatggtc aatancctgg ttctgtgtgt naaattgggt ntccgggtca nnaatttcaa      780
nannanatan naagcncggg aancataaan ttgttaaagc ccnggggttc cctnaatnan      840
tttgncttar tnaacntta aattngngnt ttncnncan anngncngnt tttcaattc      900
cgggaaanc% ngctntnngn agctngcatt atcnanttcg ggccaaaangc gcggggg      957

```

```

<210> 7
<211> 1024
<212> DNA
<213> Homo Sapien

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<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

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agtatagtgg tgtgatcttg gtcactgca acctccacct cctgggttca agcaatgctg      120
cctcagcctc cccagtagtt gggactacag gcgtgtgcc aacaccccg ctaatttttg      180
tatttgagc agagacgggg tttcatcatg ttggccaggc tggctctgaa ctccctggcct      240
caagtgcac gctgcctca acctccaaa gtgctgggat tacaggcgtg agccaccgca      300
cctggcctct atgctcgaat ttctactctt agctaactct tctaacacat atgcccttca      360
ttgggtaaag ctggctcagc agactaatta cacctgtcat gtaatacaag cctctccctg      420
gcctgtatta tctcatgggt gccttctatt tgtgacaagt gctatgaata ttccttttta      480
agaagtgata caaaatcttt ttttttttct tgaacaggat ttttaactca gacagtgtaa      540
acatcatgac aattctggaa tgtctgaagt ttgagataga agattgtcta agaaaagctg      600
agattgnctt agctgtttgt ggtatccgaa ttccctctgga acatgggcat caggaaccaa      660
gcgatgccac tgctactggg cagggttttt atattttacc taaacagaga ccaatgacgc      720
tgacctacct taatgaaaat ttcagaaaaa ccatctggaa tcagcccat catgtccaga      780
attggaangg aatctgggga tcaatggaac ataccgggaa atactttnt tcccccaaa      840
ccaagznaat ggaatgtcaa aagtattgga gcctaattta aaatggggnt tccntantaa      900
agntttgctt tcanttaatg ggancanttg gcnanntggt tttgggnacc cctgcataat      960
ttaaaccng nggccagttg gccaaccaan atttcancng gaaagggggt attttaaaag      1020
cccg                                     1024

```

```

<210> 8
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 8
tagangcatg ctcgagcggg ccgtcngggg gntgganctn tgcgagactn ngcccttnca      60
tactangacg actnactata ggnnnngtnc agtgcgctgc gatcggtgt agggttatan      120

```



```

ngcngnnggn ntncntntgg agagntnngn ngctnanctg ctatgntctc ntggatnnnc 180
tntgcccgcg gaaaatnaat gcgttttgaa cagttttagn tttgtgcctc atanattgtg 240
tnantgctat ncattatnnn gnntgcatat ntantctnna nngccnncaa ggcatcgeng 300
atggnctaac atctcaaaac nccttancct acanntganc nntgtggnan actttgnngn 360
ggnantgtgg ntaaaagnac canggggnaa atcntggntc agancnctan aaagcattgn 420
ttactacaac tggctcttga atatcccctt gcgctgatat ttgtgggtcag ctgcctacag 480
ttgaatatgc agcgtnacac anncnaagct gccagtgtca caattaactg aagcatnact 540
tantntgtaa ncacnatcta anttngcatc agtntctcat acatncatta catgggacag 600
gggcaagagc agtagctctg gtatgtgaca ttgatcccca gatgccttcc caatctggac 660
atgatggggc tgnnttccca atgggttacnc tgaatgca ttaagggagg tcagcgtcat 720
ttgtctcatg gatacgnaaa aatctcttnc accctgncca tnaacaggng gcaatcgctt 780
gnggncctga tgnccatgtt ccaaaaaggaa tccgatgcca nnagcngctg ggacagtctt 840
aagcttttct tcnccaccct tctatcttga acttncanac gtttccggaa acnccaanga 900
nngttaccac ttgccngacc taaaaaacnc tgttcacgaa ntnaacttn ggatttngga 960
acnctttctt tanaaagggt tatccattgc nctttgtgnc caaataggan ggcncctt 1020
nnga 1024

```

```

<210> 9
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 9
accgccctcg natccctagt aacggccgcc agtgtgctgg aatcgccct ttagagtata 60
gtgggtgtgat cttggccac tgcaacctct gcttcctagg ttcaagtgat tctcctgcct 120
cagcctccca agtagctggg attgtaagag tatgccacca cgccagcta ctttttgtat 180
ttttagtaga gacagggttt catcatgttg gccaggatgg tctcttaact cctgccctca 240
agtgatccac cagagaggag atcctcggcc tccccaagtg ctgggattat aggcattgagc 300
caccgtgccc agcctacttt ctaattaacc aaaaaaaaaa aaaaaaaagcg 360
gccgtgaat tctattctag aattaagcgg ccgctgaatt ctgacctgc cggggcggcc 420
gctcgagccc tatagttagt cgtattagga tggaaaggcg aattctgcag atatccatca 480
cactggcggc cgctcgagca tgcatntaga gggcccaatt cgccctatag tgagtcgtat 540
tacaattcac tggcgcgtct tttacaacgt cgtgactggg aaaaccctgg cgttacccaa 600
cttaatcgcc ttgcagcaca tcccccttgc gccagctggc gtaatagcga agaggccga 660
ccgatcgnc ttccaacagt tgccgagcct gaatggcgaa tggacgcgcc ctgtagcggc 720
gcattaancc gccggcgggt gtggtggtta cncgcancg tgaaccgnta cacttggcan 780
ggnccacgg cccgnttctt ttgcgtttct ttcctttcct ttnttggnga cgtttcggcc 840
gggttttccc cggtnaagct nttaaatng ggggcttccc nttaanggn tcccgaant 900
anngccttta acgggacctt gganccccaa aaaactttgg tttangggg angggttcac 960
cgtaannngg nccatttgcc ctggnataaac nggttttttc ccccnttgac nttgggnanc 1020
cccg 1024

```

```

<210> 10
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 10
gccgtcnaga nccatgcnnn agcngcggc nggtgtnatgg nnaantgcag aanacgncct 60
ncnatcctaa tacgactcac tatagggtcn gagcggncga ccggacagng nttnnggtgg 120
ctnatgccta naatcccagn acttggggag gccnaggatc tcctntntgg tggatcactt 180
gagggcagga gttaanagac catcctggcc aacatgatga aacctgtct ctactaaaaa 240

```

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|------|
| tacanaangt | agctgggcgt | ggtggcatac | tettacaanc | ccagctactt | gggaggctga | 300 |
| ggcaggagaa | tcacttgaac | ctaggaagca | gaggttgacg | tgggccaaaga | tcacaccact | 360 |
| atactctaaa | gggcgaattc | cagcacactg | gcgnccgtta | ctagaggatc | cgngctcggg | 420 |
| nccaagcttg | gcgtaatcat | ggacanagct | gttnccgttg | tgaaatgggt | aancgctnac | 480 |
| aanntnacac | aacatacnag | ccggaagcat | aaagngtnaa | gcctggggng | cctaatagag | 540 |
| gagctaactc | acattaattg | cgttgcgctc | actgcccgtt | ttncagntcg | ggaaacctgc | 600 |
| cgtgccagct | gcattaatga | atcgccacg | cncnggggag | aggcggantg | cgaatgggag | 660 |
| cttcttncgn | ttctcgttta | ctgactngat | gcggttcggc | ccattgnntg | cagcaaagcg | 720 |
| gnatcngctc | acttnaaagg | cnggnaatnc | cggttntccc | cntgaatccg | ggggattacc | 780 |
| gcaggtnaag | aacctatggg | anccaaaagg | ccagctaaaa | gggcccgga | acccggaaaa | 840 |
| aaggccnngt | tggttgccgt | tttttcanaa | ggttccgccc | ccttgaccgn | ngcnttacaa | 900 |
| aaattnggag | gcnttaaggt | cnnaantggg | ggaaaccccc | cgggaaattt | caggnntccc | 960 |
| nggggtttcc | cctgggaagt | tncttngggg | gctttccnnt | tcnaaacctg | gcgnttaccg | 1020 |
| gnaa | | | | | | 1024 |

<210> 11
 <211> 1024
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|------|
| <400> 11 | | | | | | |
| gtncgtctag | atgcatgctc | gagcggccgc | cagtgtgatg | gatattctga | gaattcgccc | 60 |
| ttgagcggcc | gcccgggcag | gtacgcgggg | gggcatttcc | ctgacgactc | gtgtgtgccc | 120 |
| tgggggagcg | gtagatggcc | cagccccaag | tggtccgac | ttcctgccc | aacatattct | 180 |
| gtgacgaaa | gcctatgttg | acctcgccg | gcactcaagg | cgtgggcagc | ggcctaaccg | 240 |
| ctgctgcggg | aacacagtcg | cgttgaatgc | tattctcaag | acagacaaaa | cagtgggaag | 300 |
| acactacgcc | aagctgctaa | ctccctggcc | attgcccgg | cttttcaccc | ccatggactt | 360 |
| tccgctggca | ttttaaaca | catagtcttc | ttctctgtgc | ttttctcttc | tctctctctc | 420 |
| tttctcttct | tctctctctc | tctctctctc | tctctctctg | tcaatctcat | aatttctctc | 480 |
| tctcgtgcca | cgttcccacc | caacgctctc | tcgcccactt | ctactggggc | ccacttccctc | 540 |
| tcctgctctc | tctgtctcaa | cgtgattgac | tttcttgtgc | tgcccaggac | ttcttgcccc | 600 |
| cgtgcgcctt | caaaacggta | agagctgcaa | ctgaacgtgt | ganacatggt | gcagataggc | 660 |
| tgagaggcng | cgggaaaaat | gcccattgaaa | ctcaaagtac | tccngccggc | ganacagcta | 720 |
| angggngant | ttcaagcaca | nttgccgggc | cgttactaan | tggattcgaa | cctccggtag | 780 |
| caaaagcttg | ggcgtaaatc | atgncaanaa | gccgttttcc | ngtnttaaat | ttgttnancc | 840 |
| gctcananat | tccanacaan | cnattacnan | gccgggaaan | ccaanaaagt | tggttaaaacc | 900 |
| ctgggggttg | ccnnaatgan | ttgangctaa | ntccnnttta | atttncnttg | cncnnaangg | 960 |
| ccggtttttc | cattcgggaa | acctgtncgt | nccaanctgn | atttantgaa | tcgggcaaac | 1020 |
| tccc | | | | | | 1024 |

<210> 12
 <211> 957
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(957)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| <400> 12 | | | | | | |
| actttttttt | tttttttttt | tttttttttt | tttttagctt | tattttttatt | gttgacacta | 60 |
| ttacagatag | aatgaccaca | accatattaa | caaaccaaaa | acctgtgcac | agaaacaaga | 120 |
| tgaagaaaat | atatcaagat | gttaaccaca | ctctttggat | ggtgaaaaca | tgggtgagtt | 180 |
| tctcttctac | atttctgtaa | cttcaaatgt | tctataatga | acacatttca | tatataatgg | 240 |
| aaatatatgt | agtaaagggt | gactacaaaa | acactagaat | gatgaccttt | caaggaaacc | 300 |
| gaaacaaaat | aaccataatc | ccacaacaac | cacacaacta | tttcttgttt | ttcatctttc | 360 |

```

ttcccatctt tgacatttat gcatacttat cactaacacc ctaataatca cagactagtg 420
cacagatcaa gatgttaaca gtttaattgtt gttgggtgtt gggaatatgt gtgaattttc 480
tttactgaat ttccaaagtt ttgtatgagt atgtantata tttgtaatgg aaaatacata 540
cataagaatt tantaccaa nacaccaaag attatttaag gaatttgaga caaaaatatt 600
tanccaaatt ccacaaatga caacaccaan tttagggtant ttccacatct ntttcaaatt 660
taanggcttt angcacacat attttaacac tgggtanccac aagcngtgtt gcnccggaan 720
caannngtng agggaaacca ggtncaggga tggtnanccan taagttgtta anggggttgg 780
gaanannngn aattttttta aacanattta cnttaanttt ccaagttttt ccnccgggga 840
annttttng gccaccaatg ggggnncccc nttatanccn ngtnanccgg ggacattttt 900
tnnnggggaa atttnganaa atttagagt ngaaangntt tttaccaaan agtnccn 957

```

```

<210> 13
<211> 1020
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

```

```

<400> 13
gtngtctag atgcatgctc gagcgccgc cagtgtgat gatctctgca gaattcgccc 60
ttcgagcggc cggccgggca ggtaccagg attcaaaagt catcttcccc ggcgggaggc 120
aaggagcgt tatggagaac ctcttaaaga tattgtgagc attctactca ttacttaggg 180
aaagagagcg ggtgttggtc caactctggc tttgtgcca ggtaggagt ggtcctgagg 240
ccgccatct gaccatactg gacctgtttt aaggtttttc tctaaaaaaa ttttagattt 300
gtcaatctgt gtcctgcag gggatgctat gtccaaatgt ccaggattt gtttttttct 360
gtctttcctg agacattccc tgcccagcta cccaaggaa ccttcaaacg agcaaatctg 420
accatatctt ctatggtcag attaaaatct tccatggctc cctattgctt atgggacaaa 480
atcaaaatc ctgagctctg tctaaaaggt gtttgatgat cttgacctgc tgactttgcc 540
agccttcttg tcagactctc gtgtcatgct ccgctagac tatgagcctg ctatttcata 600
ctatgtagct ttgtaaaagtc ccagaaaatg ctgggctctg actcttttat aactttacat 660
atactgttcc atctgcctgg aatgccttct acttgtctgt ccagcaaatt ctcaactcat 720
ctcttaaggg ccagcttca attgccgct cctancataa gtcttccctt gatctccan 780
gcagnaatta nntcccgctg accccgggga ntcccaatca gtttgtgctt tcaaaactga 840
tggnnngact tccctgaaat ttgggttacc ncaaaacgaa atgggtgaat ccnnttcccc 900
cgggggggg gcaattgcac ccttttttaa aggggaaccc tgnaaantccc aatggnntaa 960
atttgacncc cttaanggcn tnanttcnat tgagcaactt naaaaggggt tttttttttt 1020

```

```

<210> 14
<211> 1013
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1013)
<223> n = A,T,C or G

```

```

<400> 14
gtgtcgatgc atgctcgagc ggccgccagt gtgatggata tctgcagaat tcgccctttc 60
gagcgccgc cggggcagg acctcattag taattgtttt gttgtttcat tttttcnaa 120
ngtctcccc ctacnagctc acctgagata acagaatgaa aatggaagga cagccagatt 180
tctcctttgc tctcngctca ttctctctga ancctaggtt acccattttg gggaccatt 240
ataggcaata aacacagttc ccaaagcatt tggacagttt cttgtgtgtt tttanaangg 300
ttttcctttt tctnancctt ttctgcaaa aggtcactc agtcccttgc ttgctcantg 360
gactgggctc ccagggcct aggtgcctt cttttccatg tcccacccat gagccctcna 420
ctagacagct cantaagcct ggcctttcat tctgcgtgt gttcttctc ngtgaaaatc 480
caatacctct tacctcctct gcattgcaaa attctcaagg attgtcagac ttcaaacgta 540
acagcagaac caccagaagg tccnataaat gcagtagtga ccttctcaag ctgtcaggct 600
tttaaatagg atttgggatt taatgcnatg tatttttaaa ggaaagaaat aagagtgcn 660

```

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|------|
| agttttaaaaa | tgcatgtctt | ttagccaatt | cagaatcctg | cccccaaact | ttttttaaaaa | 720 |
| gtcaagacag | ataaagcttt | ggggganacg | gaaaaaaaann | gnnnaaaaaaa | anaaagtact | 780 |
| tcgggcggna | acnacgctaa | gggnnaattc | agcananggg | gggccgttac | aagnggggttc | 840 |
| nanncccggg | acnaancctt | gggggtttta | caagggcnaa | ancnggttnc | cgggggntnaa | 900 |
| aattgttacc | cgcnaaaaaat | tccanaaaaa | natncgaacc | cggaaaancca | taaanttntn | 960 |
| aancccnngn | ggccnaaggg | agngnnnaac | ccnaataaaa | tggnttggn | cnt | 1013 |

<210> 15
 <211> 951
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(951)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| <400> 15 | | | | | | |
| accctagggc | aaatactgag | cagggtaaaa | ttcccagaat | accactaga | agcgtggaat | 60 |
| atatcaatat | cctaggaaga | agattcagca | caccaaattt | cccattactg | ataacagctc | 120 |
| tgaaggcata | ataagaaagt | gagtgatcag | aagagcagag | aatgacttg | ttccagtcac | 180 |
| tgccatcttg | tttacccttt | cagtggttcc | cttacccttt | tcccactgg | gcatacagct | 240 |
| catctctctc | tgagtccttt | tctgctttcc | tcctttgtct | taaacgttcg | agtttcaaat | 300 |
| tcctcttacg | accagactta | tctcgaaata | cggtttcagc | atattgaaat | tcagctgcaa | 360 |
| aggaaaatta | tactcaaata | tcaggatcaa | aatcagaaat | aacattctaa | gagatcaaat | 420 |
| caaccgcttg | ggattctaata | gctagataag | aacttctgca | gccagaccaa | agtagttcct | 480 |
| accaacatct | tgggtgcatat | tggcactggg | cccaagaaat | ggcattttcc | tttttttttt | 540 |
| ttttgagatg | gagtcctcact | ctgttgccca | gggtggagtg | cantgggagc | gattttggct | 600 |
| cactgcaacc | tccacctccc | aagggtcaag | cgattctcct | gtctcaagcc | tcctgagtna | 660 |
| gctggggaat | acagggcata | cnacancatg | cctggctagt | tttttttttg | gaattttggg | 720 |
| tagagacagg | ggtttcatca | nggttngccc | aggcctggtn | cttggaactn | anagaccctc | 780 |
| aggntggatt | caacccaact | tccgggctac | caaaaggtn | ncgngggatt | acangcattt | 840 |
| anncaacngn | gccctngggc | naaaatggna | anttttcang | aagggaaagc | agcnntgggg | 900 |
| atcccnngnn | naantttcac | caaggcccta | aaccagggnc | gtaaaattgt | t | 951 |

<210> 16
 <211> 1008
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1008)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| <400> 16 | | | | | | |
| gtgcatgca | tgctcgagcg | gccgccagtg | tgatggatat | ctgcagaatt | cgccctttcg | 60 |
| agcgcccgcc | cgggcaggta | cattacttgg | tggttaacatt | gttggcagtg | gtagcccctt | 120 |
| ttcagaaagc | aacttgctgt | aagtcagggt | gtccgttcca | accttcagct | agtgaagg | 180 |
| tagtaacaaa | tggtaaacaa | gagaatgatt | gtttaaacct | atctgtggac | acttaatgca | 240 |
| actgtttaaa | aatgataatc | acgagttatg | tagcaacgtg | gaaatatatt | tacagaacat | 300 |
| taagtggaga | aagcaggaca | cgaaagtata | tttatactac | agttataact | caacagttca | 360 |
| tttatatgct | gttcatttaa | cagttcattt | aaacagttca | ttataactgt | ttaaaaatat | 420 |
| atatgcttat | agtcaaaagc | tggttggttg | ttgttggttg | aggcttatag | ttgagcatta | 480 |
| ttttcttaaa | tttcttgaat | gttctttatg | gtagtggtac | taaaaagtgt | atgatcacat | 540 |
| tttcattgtg | aacataattt | gaactcatta | tcacacactt | ggaaaataca | gaaaagtggg | 600 |
| ggaaaaaaa | tcatatcccc | ancatccaaa | gacatatact | ctcctcttat | cctgttcaat | 660 |
| cctggtttcc | ggtgcacaag | gtttatgatt | ataactgtgt | caaaatgtat | aatcaaaaata | 720 |
| gctgttacat | taccttggtg | gnantaaggg | taaataacct | caccttaaat | ttttcaaaan | 780 |
| gttcccaana | ataaaggtcc | ggataacagt | ggtataagtg | tgtcccaatt | gggggtgcac | 840 |
| aatacattcc | cangngggaa | aatttnnaaa | tnaagttaaa | ttattttaaa | aaattttcaa | 900 |
| aattcccaan | anctaanaac | taangggnaa | aaacctngat | cgggntnccc | caaacnngtt | 960 |

taantgnnac nccttgggaa aanaagnttt aaaaanggtg gcaaaaaag

1008

<210> 17
 <211> 1024
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

<400> 17
 gtgntcttag atgcatgctc gagcgccgc cagtgtgatg gatattctgca gaattcgccc 60
 tttnnanagg nccgncgggc angnantctt cccncctntg ccatnannca cggnnanaaa 120
 cngcagtggc actaantntg agacaatctt ncaaaccagc ttcattgtcg tncacttntc 180
 nnngtncaa angaggcca ggagggaââ catcacant gcgctaagnc cngntccggg 240
 nngtcagcat nngntctgtt ncaanncccn cgntcggtcc cctcatccta ctctgcctcc 300
 natgactttg cncctcagac ntcttgggaa naaggnttcc nggggggac accgcgtccg 360
 gccgnnnntg tctcggggcc acttggcgtg tgtgataaat caatcaagct gttnanntcg 420
 nacgagtctc nggtngcctg cananntaag cctcatcatc agagccttcc ctcaaaactg 480
 gantcccaana tgtcatcagg ttntggtnt tttcagccan naggaagccc tcngcattga 540
 atccnagaac ttgggcatgg ttnaagatct acaagntnga atacgctgcc cgcnaaaanc 600
 nttcaaccct aacaggaagg tnggattcaa ggaaggtgta anggnncatt annccacncg 660
 ggggnaccaa gggagntana antanncatn nntttgggt cgcccnccga agggnnntaa 720
 cccccggaat tnnntttng ntnaagggg gnnnnnggna aatcccngtt cncatttgg 780
 gaaagggann ccttnccttn cnntnggct ntaaaagnnt tancaanacc cgnnatntg 840
 ttnangggcc cgnttttcaa nggggttaan nnttngggg aacccccnnc cccaaagng 900
 gnnnaanggg ggnaattccc aanaaaacng gggggnncc tnnnnnang gnttcngnn 960
 cccnnaaagg nnncttggg ggnnannann gnncaaaaa ggggtcccn nnnnaattt 1020
 tttc 1024

<210> 18
 <211> 981
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(981)
 <223> n = A,T,C or G

<400> 18
 acgcgggaca gagagaagg taagagcaac aagatgggag gcagctgcat ggaacctgtc 60
 ccactgagga agtaaaacag agttttactc ttgttgccca ggctggagcg caatgggtcg 120
 atctcggtc accgcaatct ctgcctcctg agttcaagcg aggagcaacc ctacctgatg 180
 gactggactt ctgcctggat tggagtttga tcatgcctcc atatgggtgt ttaccaggcg 240
 tatgcattga acctgagttt gtctcttcaa tacaaggaaa atctctgccc cttagtgatt 300
 ttccaagaaa catgagcttc tgcctttcaa tgaggagat actcagaagt catgttcgag 360
 cactccggaa aatgtccttg gagtttcaac atttctttg tcttccacat ttcattttgt 420
 cctgattaaa gaggaagcca agttgtgtt tgtgtggcca tgtgagcagg canggagatg 480
 gtggctgcct agaagccaag agaagtggcc tcaagatgaa atctaccttg ctggtactgc 540
 cggggggcgc cgcccgggca aggtacnttt ttttttttt gtttttttt ggcaaaaagg 600
 ctgtaaaagt tttttgggga gaaattttta tgggncaaan tttccaacac aggnagcanc 660
 cctgaaacca attttaagcg ggtccttccc ttttaaggct gttnaatgac ccttcaanc 720
 ttctcaagg ngtttttcac cctccnccg ggattttgg aaaggcccaa aantccntgg 780
 gnaanaaagg gacaatctcc cgggnttaaa aaccaattnt ncggggngna accnggttcc 840
 ctgggctann cncctttaan ggntnccgg gcccttttgn gggggnaatt ttcaaacggn 900
 ncctncattt tctnagggg naancncct tngggtcann gggncaann cccaagntt 960
 caaancnaa ntcttttgg g 981

<210> 19

<211> 980
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(980)
 <223> n = A,T,C or G

<400> 19
 acttttttct tttttttttt tttttccgct tccccaaagc tttatctgtc ttgacttttt 60
 aaaaaagttt gggggcagat tctgaattgg ctaaaagaca tgcattttta aaactagcaa 120
 ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat ttaaagacct 180
 gacagcttga gaaggtcact actgcattta taggaccttc tgggtggtct gctgttacgt 240
 ttgaagtctg acaatccttg agaatccttg catgcagagg aggtaaagg tattggattt 300
 tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg tccagtggag 360
 ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc cagtccactg 420
 agcaagcaag ggactgagtg aagccttttg caggaaaagg ctaagaaaaa ggaaaaccat 480
 tctaaaacac aacaagaaac tgtccaaatg ctttgggaa: tgtgtttaat gcctataatg 540
 ggtcccaaaa atggggtaac ctagacttca gagagaatga gcanaganca nagggagaaa 600
 tctggctgtc cttccaattt tcaatccgtn atcccagggt aagctgggta ngagggggag 660
 ancattngna naaaaaatnga aacaacanaa nccagtttac taaatnaagg gaacctgccc 720
 cngggcgggc cnccaanggg ccaaatttca ancaacanng ggcgggcccc ttaccaantg 780
 gnattccgaa gccncgggta accaangcct ngngttnaat ccagngggnc aaanccngtt 840
 tnccngngnt gnaaattggt tancccgccc naanaattcc acancaacga atcngaagnc 900
 cgggcnagca tnnangnnta aancccgngg ggggcncaaa agggaatgnn nccanaccn 960
 attaaatncg gttgccctg 980

<210> 20
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

<400> 20
 cttggtaccg ngctcggatc cctagtaacg gccgccagtg tgctggaatt cgcccttcca 60
 tcctaatacg actcactata gggctcgagc ggccgcccgg caggtattca gcggccgctt 120
 tttttttttt tttttttttt tttttttttt attgntgaca ctattacaga tagaatgacc 180
 acaaccatat taacaaacca aaaacctgtg cacagaaaca agatgaagaa aatatatcaa 240
 gatgttaacc acactntttg gatggtgaaa acatgggtga gtttctcttc tacatttctg 300
 taacttcaaa gtttctataa tgaacacatt tcatatataa tggaaatata tgtagtaaag 360
 gnggactacc aaaacactag aatgatgacc tttcaaggaa accgaaacaa aataaccata 420
 atcccacaac aaccacacaa ctatttcttg gttttcatct ttcttcccat ctttgacatt 480
 tatgcatact tatcactaac accctaataa tcacagacta gtgcacagat caagatgtta 540
 acagttaatt gttgttgggt gttgggaata tgtgtgaatt ttctttactg aatttccaaa 600
 gttttgtatg agtatgtatt atatttgtaa tggaaaatac atacataaaa tttattacca 660
 aaacacaaa gattatttaa ggaatttgag acaaaatatt taaccaaatt cccacaatga 720
 caacactatt ttaggtattt tccacatctt ttcatttaag actttatgcn cncatattta 780
 acactgggat ccacaagcgt gtgccctgaa accaggatan nggggaaacn ngatcaagat 840
 gtttagccagt agtttggtag gnggttggga aatataggga attttttnaa aaaaatttac 900
 tttatttncn aaattttccc cttgggnaag ggattatggc ncnccaangg gngccccctt 960
 aaanacnctg gttttcngga cttttttttt nggggaccat ttggaaaaaa ttaangggga 1020
 aggt 1024

<210> 21
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 21
nagnggcang cncgagcgcg cgccagtggtg atggatatct gcngaattcg cccttcntan 60
cngngngncac tnaatgcang ngcnaacca tgataacccg agttatgctn agcanaggaa 120
ctatatgtac agaaacatta agtgnggaaa gccnnacncn anggnanntg aatactacng 180
tnataactna ncagaccatt nanatgctgc acattttaaca nnnctnncan acagnanatt 240
ataannngnt ananntatat atgctnatng accaaagctg tngaggggtg gccgttgaag 300
gcnnnnngnt naggattanc atnttacnnc acttgccctg cctntatggc agggttacta 360
tctttgttac tgatcacgac atcantgcga acntaanacn aacnncntat nacacactng 420
nnanagcccg aatcgngngg gaacagtatc ntntcncnc canccnaga catntcnnn 480
cctcttatcn tgancattcn agnttctgtg cacaggtnta tgatnntanc ngtgncaaan 540
tgnntcttna aantanttgc cacatnacct tngaggantt atggannaan actctcactt 600
taaancnnc aancgacccc nanaanaactg tncgtntaac agtgcanaat gtgtgatttc 660
atagttntgc acacacatnc ccacnggaan cacaggcggtg tgcactgaac attntagagg 720
ntacctatct gccgacacct aacactacng gtnacggcaa gatcggaacc tntaannggg 780
ttaacncaaa cnctagggat acccngggaa atatgtggcc caccgtttaa acccccgaag 840
tgccngtac ccnggacatt gttttcgtgn cggtanttgg gttaaanntg ggntnaaaac 900
cctaattccc cctgggggtt tgccactaaa tttgaaggac cttttggccc tgccaaaatc 960
annaaccctg gcncanaact ttggggganc nggnnaggna gggtnccct tttttccga 1020
aggc 1024

<210> 22
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 22
gtgcgatgca tgcncgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg 60
agcgcccgcc cgggcaggta cttttttttt tttttttttt ttttttttag attccacata 120
tgagtaaaat catgtggat ttgacttgcc ttttaaaaca cagtgaagaa tctgtcttac 180
tttatccagg gtaggagaag ctacctgggc tccccataaa tgagggtgctc catcccatca 240
tacagcccca tcatattcag tgcttcccag atgacctcct caggggtgca gtagccctct 300
atgaagatta tgcttaggat aagtatgaga atgccagtct tgggcatgct ctggacatca 360
ctcagcatcc catcataggt gagggccagg gaggtgacaa ggacaaagga gtggccagtg 420
ggatccactt cctttacatc aatgccaaag accagcagca tgcactcgga ggcttacta 480
aacaacaaag ggaagtgggtc ttcataattt tttatgacac tctccaagta tttctgcctt 540
tgtgatcggtc tccttcattt gatacttgaa gagcagaaac tgcaccaaatt cagtcacctt 600
ttcatctatc tcaactctgg gtaaaagactc actgtctggc aaggacctgg taggggtgctt 660
gggactcccc tccttttggc tgcnggagnc ctcanagat tgatctaag gaagggaatc 720
aacgaccna ggggaaggag cagggtatc tngagcaacn ctggggaagg atttgggggtc 780
nccatcatca ngcagnaacc tccctcccgg gggtnccctg ggnanttaaa gggatnccca 840
ggaaggagga nggaggggaan agggaggang agggaaaaac naggntngga aaaagggaacn 900
cgnggggaaa ttggggntta tacaccgcn ncnnnaannn gggngagnc ngngnccng 960
tcngngnncn gnttccnntt gggngaagnn ggnttctcnn angggncgnn nnnnnnnnc 1020
cnnt 1024

<210> 23
<211> 948
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(948)
<223> n = A,T,C or G

<400> 23
acttttttct tttttttttt tttttccgtc tccccaaagc tttatctgtc ttgacttttt 60
aaaaaagttt gggggcagat tctgaattgg ctaaaagaca tgcattttta aaactagcaa 120
ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat ttaaagacct 180
gacagcttga gaaggtcact actgcattta taggaccttc tgggtggttct gctgttacgt 240
ttgaagtctg acaatccttg agaatctttg catgcagagg aggtaagagg tattggattt 300
tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg tccagtggag 360
ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc cagtccactg 420
agcaagcaag ggactgagtg agccttttgc aggaaaaggc taagaaaaag gaaaaccatt 480
ctaaaacaca acaagaaact gtccaaatgc tttgggaact gtgtttattg cctataatgg 540
gtccccaaaa tgggtaacct agacttcaga gagaatgagc agagnagcaa aggagaaatc 600
tgggctgtcc ttccattttc attccgttaa cctcaagggt anctggtaaa aggggagaca 660
ttagaaaaaa aatgaancaa caaancaatt actaatgang tacctgcccg gggcggccgc 720
aaagggcgaa ntccaagcac acngggcggg ccgttacaan tnggatttcg aaccgggtac 780
caaancntgg gngtaaanca nggnncaana accggnntcc cgggggtgaa aantgtttat 840
ccgccccaaa attccaaaaa ancaatanga aaccggaaan cataaagtnt taaaccctgg 900
ggggggccca aangantgag ccaaanccca attnaattgg gttgnncc 948

<210> 24
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 24
taccgcctc gcattccctag taacggccnc cagtgtgctg gaattcgccc ttcttatctg 60
tggcacttta atgcaactgt ttaaaaatga taatcacgag ttatgtagca acgtggaaat 120
atatttacag aacattaagt ggagaaagca ggacacgaaa gtatatatat actacagtta 180
taactcaaca gttcatttat atgctgttca tttaacagtt catttaaaaca gttcattata 240
actgttttaa aatatatatg cttatagtca aaagctgttg tgggtgtgtt gttgtaggct 300
tatagttgag cattattttc ttaaattttc tgaatgttcc ttatggtagt gttactaaaa 360
agtttatgat cactttttca ttgtgaacat aatttgaact cattatcaca cacttggaaa 420
atacagaaaa gtggaggaaa aaaaatcata tccccaccat ccaaagacat atactctcct 480
cttatcttgt tcattcttgt ttctgtgcac aggtttatga ttataactgt gtcaaaatgt 540
atattcaaaa tagctgttac attacctttg tggaaattatg gttaaatact ttcactttta 600
ttttttcaaa tgttccctat aataatgtcc tgataacagt gtattatgtg tgtctccatt 660
ggtgtgcata atacataacc agaggaaaaa ttagaaaata aagtaaaatta ttttaaaaaa 720
ttacctatat tcccaacacc taacaactac tgnntaaacca tcttgatctg ntteecttat 780
cttggttcag tgcacacgct ttnggaataa cagtggttaa atatgtgtgc cataaaggcc 840
ttaaatggaa aagatgtggg aaaaataact taanaataag ggtggccttt ggggggaaat 900
ttgggttaaaa aattttgggc tcnaaaattc cnttaanaaa acctttgggg ggtttgggna 960
ataaaaatnt taanggangg aatnttcccn ttccantttt nattccttcc tcttcccaaa 1020
actt 1024

<210> 25
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G


```
<210> 26
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G
```

```
<210> 27
<211> 935
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(935)
<223> n = A,T,C or G
```

| | | | | | | |
|------------|------------|-------------|-------------|-------------|------------|-----|
| acatgtcgcg | gcctgtcaga | aataggaagg | ttgttgatta | ctcacagttt | caggaatctg | 120 |
| atgatgcaga | tgaagattat | ggaagagatt | cgggccctcc | cactaagaaa | attcgatcat | 180 |
| ctccccgaga | agctaaaaat | aagaggcgat | ctggaaaagaa | ttcacaggaa | gatagtgagg | 240 |
| actcagaaga | caaagatgtg | aagaccaaga | aggatgattc | tactcagca | gaggatagt | 300 |
| aagatgaaaa | agaagatcat | aaaaatgtgc | gccaacaacg | gcaggcggca | tctaaagcag | 360 |
| cttctaaaca | gagagagatg | ctcatggaag | atgtgggcag | tgaggaaagaa | caagaagagg | 420 |
| aggatgaggc | accattccag | gagaattccg | gcagcgatga | agatttccta | atggaagatg | 480 |
| atgacgatag | tgactatggc | agttcgaaaa | agaaaaacaa | aaagatggtt | aagaagtcca | 540 |
| aacctgaaag | aaaagaaaag | aaaatgcccc | aaccagact | aaaggctaca | gtgacgcca | 600 |
| gtccagtgaa | aggcaaanng | aaaattnngt | cgccccacag | cttcaaaggc | atcaaanngg | 660 |
| aaagaatccn | tctccaaaag | aagaaaagatg | aggggaaccg | aaaaccccc | agaaaaggaa | 720 |
| aacatctana | agcccccaa | cccagaaatc | tggggataaaa | ggggctgaaa | aataaacccc | 780 |
| cntttgggga | agntttaaaa | ttatgaangg | nctggggaaa | aaattttttt | aaaaaannnn | 840 |
| nnnnnnnnna | aaaaaanttt | cctgcccggg | ggggcgccnc | naaaggggga | anttcaanaa | 900 |
| aaangggggc | ggtttaaaaa | ggggtttcca | ccccn | | | 935 |

<210> 28

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 28

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|------|
| cttgggnaccg | ccctcgatc | cctagtaacg | gccgccagtg | tgctggaatt | cgcccttcct | 60 |
| atctgtggac | acttaaatgca | actgtttaaa | aatgataatc | acgagttatg | tagcaacgtg | 120 |
| gaaatatatt | tacagaacat | taagtggaga | aagcaggaca | cgaaagtata | tttatactac | 180 |
| agttataact | caacagttca | tttatatgct | gttcatttaa | cagttcattt | aaacagttca | 240 |
| ttataactgt | ttaaaaatat | atatgcttat | agtcaaaagc | tggtgtggtg | ttgtgtgtgt | 300 |
| aggcttatag | ttgagcatta | ttttctttaa | tttcttgaat | gttctttatg | gtagtgttac | 360 |
| taaaaagtgt | atgatcacat | tttcattgtg | aacataattt | gaactcatta | tcacacactt | 420 |
| ggaaaaatata | gaaaagtggg | gaaaaaaaaa | tcatatcccc | accatccaaa | gacatatact | 480 |
| ctcctcttat | cttgttcatt | cttgnttctg | tgacacaggt | tatgattata | actgtgtcaa | 540 |
| aatgtatatt | caaaatagct | gttacattac | ctttgtggaa | ttatggttaa | atactttcac | 600 |
| tttaattttt | tcaaatgttc | cctataataa | tgctctgata | acagtgtatt | atgtgtgtct | 660 |
| ccattggtgc | gcataataca | taccagagg | aaaaattaga | aaataaagta | aattatttta | 720 |
| aaaaattacc | tatatccccc | aacacctaac | aaactactgnt | aacatcttga | nctggttcct | 780 |
| ctatcttggg | tcaagtgcac | accgcttgng | aataacaagg | gttaaaaatg | ngngccataa | 840 |
| aggtcntaaa | atggaaaagg | atgtgggaaa | aatnacctaa | aaataggggt | ggccattggg | 900 |
| gggnaatttg | ggttaaaaaa | tttgggctcn | aaaatncctt | aaaaaaaaanc | ctttgggggt | 960 |
| tttgggaaaa | aaaaatttta | ggggagggaa | ttttccattt | ccaaatntta | ntccntactc | 1020 |
| ntta | | | | | | 1024 |

<210> 29

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 29

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| taggatncat | gctcgagcgg | ccgncagtg | gatggatata | tgcnagaata | cgcccttcca | 60 |
| tcctaatacg | actcactata | gggctcgagc | ggtcgcccag | gcagggtgcta | acaaacaaaa | 120 |
| aacctgtgca | cagaaacang | atgaagaaaa | tatatcaaga | tgtaaaancac | actctttggg | 180 |
| tggtgaaaac | atgggtgagt | ttctcttcta | cntttctgcn | antncanagn | ttctataatg | 240 |
| aacacatttc | atatgtaatg | ganntntntg | tagtgnaagg | tggactaccg | gaacactaga | 300 |

```

atgatgacct ttcaaggaaa ccgaancaaa ntnacntan tcccacaana accacannac 360
tattncntgg tnnatnatgtt tcttcccatc ttgacattg atgcntactt aggactancg 420
ccctaataat ccagacttn ggcacagatc aaganggtaa cnggtgattg gaggtgggtg 480
gccggaantt ggggtgattg ttntttatgg anttnccann ttttggtag ngattgnna 540
aaatnnga anngaaacnct tacttnaant tgnttaccnn aacnccnagg atnttttaag 600
gattnggggc cnaaattttt acccaaattc cnncaangcc ancncgtgt aagtcatttt 660
caaanatttt tcncttaaag accttaaggg cccctaaggt aacctgggaa tanaaggggg 720
ggcacttgg accagntcc nagggaaacng nccaagant tttcccntt ntttgtttg 780
gggttgggaa atnnnnngaa attttttaaa ggtaatncac ttaatttgcc aaaggaattc 840
ccttnggggg aggnnttatt gcncacccat gggagacccc cntaaggccc cnggaataag 900
ggcctttttt tttngggacc atttgggaaa aatttaaang ggaaggcnnt ttgnaccctt 960
aatttcccca aggnaaangg aaccnccnt tttgganatt gcattttngg ccccgttttt 1020
aagg 1024

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<210> 30

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 30

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gtgcgctcta gatgcatgct cgagcggccg ccagtgatg ggatattctgc agaattcggc 60
ctttcgagcg gccgcccggg caggtacttt aattttgctt gttcaaatga tctacactta 120
cattttgcaa atcttttttt ttaaattttt taaattttat attttttttc cagccaactc 180
aaggccaaaa aaaattttctt aatatagtta ttatgcgagg ggagggggaag caaaggagca 240
caggtagtcc acagaataag acacaagaaa cctcaagctg tgaggtcaat ttgtaattaa 300
aagaatacta agattagatg aacacaacac tcagaaatac tctaggagag ctgaaaaaga 360
aggaacagat gttacaaaaa caaattaagg ctgctgggga acctgagtcc atgttaagct 420
tgggttgact gtaaagaatt tttttttttt taatgcaagt tagacatgga gttagagggt 480
cagataaata acgaagagaa ttaagtttagc gatagaaaga tctaaggata ctagctcctg 540
ggcacctagg gtgcaaaactg acttgtggca gcataagctg atgctgcaca ggggacccaa 600
gccatgttgc tacttgtcac ttaaggcang aagcgcacaa aggaagtgat gaaaggggat 660
tagcctgcaa cattatttac agcatganag cctctcctac ggggtcccaac cttcattagg 720
cactactggt gattcaagtg aatgggttgt aaccantcc ttaaaaggca aaggatgta 780
ggantttaca gggaaaaaag cttccggggt tttancaatt caccaatcan caaaccacat 840
attgaagtgt ggttaaaaaa aaaaanannn anaaaaaagt nccctcgcc gngaaacanc 900
cctaaggggg naaattccag canactgggn gggccgntta caaaggggtt cgaaccncgg 960
taccaaacct tgggggttaa ncaaggggca aaancgggtt ncccgnnggg aaaattgttt 1020
nccg 1024

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<210> 31

<211> 1019

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1019)

<223> n = A,T,C or G

<400> 31

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gtgngatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg 60
agcggccgcc cgggcaggta ccatgctgac ttcttggtat cttttaaggc ctaattttcc 120
cttccttgag attactgtag tgtgtccag ctaatttcta tttggaaacg agttggaaca 180
gctgaaaaat aggtattatt gaaggcaaaag cagcctcacg tcagtttttt atcagctcat 240
ttgggaagtt tttttttttt ttttttttta attaattaga aagtaggctg ggcacgggtg 300
ctcatgccta taatcccagc acttggggag gccgaggatc tcctctctgg tggatcactt 360
gagggcagga gttaagagac catcctggcc aacatgatga aacctgtct ctactaaaaa 420

```

| | | | | | | |
|------------|-------------|------------|-------------|-------------|------------|------|
| tacaaaaagt | agctgggcgt | ggtggcatac | tcttacaatc | ccagctactt | gggaggctga | 480 |
| ggcaggagaa | tcacttgaac | ctaggaagca | gaggttgacg | tgggcccaaga | tcacaccact | 540 |
| atactctagc | ctgggcgaca | gaggtgggga | aaaaagtagg | acccctgtcc | tatattcagg | 600 |
| ttttctcac | atatatgaac | ccatctaaat | tctacgttgt | taaagggtanc | ttaggttaat | 660 |
| taagtccata | cttattttaag | accaatatgg | ggtgaaatgg | gatttttttt | taaaaatcct | 720 |
| acagntnagg | ctttccnact | ttccttcnaa | atgaggaaaa | aaagggtgaca | aaaattcaag | 780 |
| tgtcaatgtc | ccctcctggg | gaaanagggt | tanaaaaaaca | acaggctcaa | ccttctgaac | 840 |
| tnctaacaan | ttcccttnga | aanttaacga | anccattaaa | atcnngattt | taaaagagga | 900 |
| aaanaaaaaa | gttcctcggn | cggnnacaan | cctaaggngg | aaattccaca | aaaanngggg | 960 |
| ggcctttana | aagnggttcc | nacccggtac | aaaaccttgg | gnntaaccan | gggcccaant | 1019 |

<210> 32
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1) ... (1024)
<223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|------|
| accgccctcg | natccctagt | aacggccgcc | agtgtgctgg | aattcgccct | tgttggtggg | 60 |
| tgttggaat | atgtgtgaat | tttctttact | gaatttccaa | agttttgtat | gagtatgtat | 120 |
| tatatttga | atggaaaata | catacataaa | atttattacc | aaaacaccaa | agattattta | 180 |
| aggaattga | gacaaaatat | ttaaccaa | tcccacaatg | acaacactat | tttagttatt | 240 |
| ttccacatct | tttcatttaa | gactttatgc | acacatattt | aacactgtta | tcacaagcgt | 300 |
| gtgcactgaa | acaagataga | ggaaacagat | caagatgtta | gcagtagttg | ttagggtgtg | 360 |
| ggaatatagg | taatttttta | aaataattta | ctttattttc | taatttttcc | tctgggtatg | 420 |
| tattatgcac | accaatggag | acacacataa | tacactgtta | tcaggacatt | attataggga | 480 |
| acatttga | aaattaaagt | gaaagtattt | aaccataatt | ccacaaaggt | aatgtaacag | 540 |
| ctattttgaa | tatacathtt | gacacagtta | taatcataaa | cctgtgcaca | gaaacaagaa | 600 |
| tgaacaagat | aagaggagag | tatatgtctt | tggatggtgg | ggatatgatt | tttttctctc | 660 |
| cacttttctg | nattttccaa | gtgtgtgata | atgagttcaa | attatgttca | caatgaaaat | 720 |
| gtgatcatta | aacttttttag | taacactacc | aataaaggaa | ccatttcaag | aaaatttaag | 780 |
| gaaaaataat | gctcaactat | taagcctacc | acaaccaaca | cccacaacag | cttttggact | 840 |
| attaagcnta | tatattttta | acnggtatta | atggaactgg | ttaaatgaac | tggtaaaagg | 900 |
| aaccgcatnt | taaatggact | ggtgnnggta | taaccggtgg | tataaaaana | cctttggggc | 960 |
| ctggtttttc | ccttaanggt | ctgnaaanat | attttctcgt | ngtccanacc | ncgggatatc | 1020 |
| aatt | | | | | | 1024 |

<210> 33
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1) ... (1024)
<223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gcctcnaga | cncatgctcg | agcggncgnc | agngtgatgg | atatnnngca | gagncgccc | 60 |
| ttccancna | atacgacnca | ctatagggcn | nncnnntng | gcnnctttgn | tgccccccn | 120 |
| ctcgnataat | anctatatta | acgaaattgt | nctggccttg | agttggctgg | agagaaatat | 180 |
| tnngagnnnn | accngtnnnn | ntnngnnatc | ngtaaantgt | aanagtagnt | catttgaaca | 240 |
| agcaatnatt | naantaccca | ctggnggaaa | ngngnctgaa | tcttactctt | ntggatctgc | 300 |
| aggantaggg | cttgtnagta | tgtcaaanat | gcnnncagtg | tcaangttta | ngccnattgt | 360 |
| aganctngta | gcaggaancn | acnntgangg | ancnncagaa | nggagncctn | anacatnncc | 420 |
| agatntacga | ggngagagga | gacanaacga | gaaagacacc | ntaggnncca | nctgnagaag | 480 |
| gncaggattc | tgagaatgaa | ntgcncggnn | agtccnganc | agattggaaa | aggagnttct | 540 |
| ganggnatgg | tgcacnngag | ggctgacngg | tangaggnac | tgntgttgga | acgnacatag | 600 |

```

cgaaagntgn tgngcagtga ggattactac atgnngaaag gactcttgaa acgaggaact 660
aactgtgatg ncanggctga agtttgggcn nccatacttt gnaggttaca attnttngca 720
gtggnccgnc cgtttaana gccnttttga tggaaantca aggggtgnncg gtacnacctt 780
ccnttttagg nacaaggcnt tnccgantgg gtngccagga agaanganng ccnnanccct 840
annngggggg ccccttaatn gcacnggggtg aacaatgcna accctcgggt tattggaach 900
accngggana anatgggttac cgaaccatta ngtgggggna aaccgggacc ccggaaggct 960
tttttncct cngggtaaaa acttaacaga ccnatttttt gcccgcctt taacangtct 1020
tttt 1024

```

```

<210> 34
<211> 982
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(982)
<223> n = A,T,C or G

```

```

<400> 34
acaacaatct aagcaaatct caaatacaac atacttgtaa ttagaacaca atgcaatgac 60
ttgatttttag caagaactag acacttaatt tggtaaaaaga aaccaaaca tgcattatat 120
tgaatactaa gctaagttac cataattagt cttacaaatt ctcaaatttc acaactactt 180
ttgaacatct aaatttaaac ctaaattttt taattaaatg cctgttcaac aaagctaatt 240
ggaacaaaca catttatgta aatttacatt ctagaatacc agggtaaaaca aggagacgtt 300
attcaaagat gaatgagaaa gtctattct tttcatcat ttgtgtgatc aggttgcaaa 360
ggacatgctc tttcctcgat gaaactgatg tcgaattagt ggagaggtg gaagaaccaa 420
gcacctttct gggggctcga gcagccacca cttttctgta agtgccctggg aacactgtct 480
gctttagtcc gcacatggt caaacaagaa gagaggagag gagagaacga actgacttcc 540
cagccgaagg tgtttcactg ggacaaggcc ccgcgttacc tgcccggggc gggccgctcg 600
aaanggcgaa ttccaagcaa cactgggcgg gccgtttacn nagtgggatt cggngctcgg 660
gtancaaggc ttgggggttaa tcaaggggca atagccggtt ttcccnnggg tgaaaaatgg 720
tnttccngnc acaantccca nacaancatt ccgaagccgg gaancntnaa agtgttaaaa 780
ncctgggggt ngcccaaatg angtgngct naactcccat ttaaattngc gnttgcgcc 840
nannggccng cctttccaat tncggggaaa cctgttncgt gccaaagtcgg cantaaagaa 900
atcncggcna antccccggg gnaaaggcg ggnttgccgt nttggggggc gncctccggg 960
tttcccgggc caaagggann ng 982

```

```

<210> 35
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 35
cttggcccg cctcggatcc ctagtaacgg ccgccagtgt gctggaattc gcccttccat 60
cctaatacga ctactatag ggctcgagcg gccgcccggg caggtataaa atttaaaaaa 120
tttaaaaaaa aagatttgca aaatgtaagt gtagatcatt tgaacaagca aaattaaagt 180
accactggg ggaaatgtgt ctgaatctta ctcttctgga tctgcaggat tagggcttgg 240
aagtatgtca aagatgcagg gagtgtcaaa gttaggaag attgtagagc tgagagcaag 300
aagcagaaat gagtgagtca aagaagggag tcctaataca tcaccagatc taggagggga 360
gaggagacag acagaagaaa acaccagagg caagaactgt agaaggccag gtttctgaga 420
atgaattgag cgggggtgtc tgagcagttt ggaaaaggag tttttgatgg tatggtgtag 480
gtgagggtcg gctgcatagg aaggactgag gttggagcgg acatcgggaa agctgagggg 540
cagtgaaggt tactacatgg gaaaaggact cttgaaacga gaatcagtgt tgatgtcagg 600
gtgaactttg tgggtacatt acttggtgtt aacattgggt gcagtggtaa gccccttttc 660
agaaagcaac ttgcttgtaa gtcanggtgt ccggtccaac ctttaactag tgaaaaggta 720
gtaaccaatg gtaaacagg agaattgatt gttnaaccct atctgnggac acttaaatgc 780

```

| | | | | | | |
|-------------|------------|------------|-------------|------------|-------------|------|
| caactggttta | aaaatggnaa | tcacgagttt | tgtanacaacc | ggggnaatat | atttaccgga | 840 |
| acctttantg | ggnnaaagcc | ggncnccnaa | ggntttttat | tncttcnggt | tttaacctta | 900 |
| acaggtncaa | tttataatgc | cgggccattt | aacaggtcat | ttttaaccgg | gtcnnttttt | 960 |
| accnggtta | aaaaanntnt | atgcctttag | gncaaaanct | ttttnnnggg | gntttnttgtt | 1020 |
| nang | | | | | | 1024 |

<210> 36

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 36

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| taccgcctcg | natecctagt | aacggccggc | agtgtgctgg | aattcgccct | tccatcctaa | 60 |
| tacgactcac | tatagggtc | gagcggccgc | ccggggcagg | tagcaaagt | tgtggcattc | 120 |
| ctcctcctcc | tcaagtcttt | acccgaaact | acttcccaag | agaggttgct | cttcccaaag | 180 |
| aatcacctgc | cctgggacca | tatggggcta | ggctgagggt | caggagccaa | gagcctgggtc | 240 |
| ccaactctgt | ctgtggctta | ctgtgagacc | ctaggcaagt | tgcttaccct | ctctgggggtc | 300 |
| caaattcttc | ctctttgaaa | taggaataat | aacttcatca | ctagaattct | tcacctgggtt | 360 |
| gttgtgaagt | taatcagaat | aaatgtggag | ataatacatg | aatgagcgta | cagaatatta | 420 |
| tttggctgtt | ctgtggcatc | gatatagggtc | atgatagtga | caatagtgtc | tgctattgta | 480 |
| ttccacacca | cttcttccct | cagctaaagc | aggaaaagaa | aggaggttaag | tctctctgtg | 540 |
| ttttttcttc | ctttccccaa | gcccactttg | ttaccttcct | tggttgctgg | atgagaaatt | 600 |
| agtcagagggt | tcagagagga | cctcaacttc | atatgcttta | aatagagcat | atgcaatttt | 660 |
| aaaccatcct | cttaaccaat | ttttcttttc | ttttcagttt | ttccccagtt | atacttccac | 720 |
| atgatacacc | agagaaggaa | gatcctttct | catactgaag | aacacaagaa | atgtgaatag | 780 |
| ttcctgcttt | ctgnaccttc | cacccaaaaca | aacttttcaa | tgatccaaaa | aactggcttt | 840 |
| gnactgggga | gtcacggaat | gggccgggctt | ccangganca | tgccgggnngg | gcctttgcgg | 900 |
| ngtcgggcct | gtgggtggcgg | cggaaaggna | accgggggga | tggnntnccg | agcctggtct | 960 |
| tgccccccng | ggncatgggtg | tggaggcaaa | gaanccctgaa | gtccccacng | gcccccgga | 1020 |
| agna | | | | | | 1024 |

<210> 37

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 37

| | | | | | | |
|-------------|------------|-------------|------------|-------------|------------|-----|
| cttggcacgg | cnctcggatc | cctagtaacg | gccgccagtg | tgctggaatt | cgcccttcca | 60 |
| tcctaatacg | actcactata | gggctcgagc | ggccgcccgg | gcagggtgaat | tcagcggccg | 120 |
| cttttttttt | tttttttttt | tttttttttt | acagggcggc | ttttgttttt | atttctgctt | 180 |
| ttttcccttt | ttcttaaaaa | aattaaataa | agttctcatt | atttcccaa | tatacatcaa | 240 |
| atgagttttc | atgcaaagca | gcagtcacag | aggcagaact | gtccccagct | cgtgctntc | 300 |
| ggcttgaaga | accaccttnt | cccggccccg | ggttctctgg | ngttctcact | gaggatggac | 360 |
| gacgcccact | gtctntccca | gctggaactg | gctatgacga | aacttggtcg | gcgtagggag | 420 |
| aggatctctc | ccctntcccc | aggatgggggt | ctcaggggac | agcaagctct | ggggcctgat | 480 |
| ccccatcact | tgnccttcca | tctgagactc | ccagtgtgac | agcttgga | ggccccctt | 540 |
| cccaggaatg | cgaggctcct | cctctcagct | ctcaatggac | atggcattaa | tgagctgctc | 600 |
| caccttataa | gccagccgnt | gccgccgtgc | ctgctcatcc | tgctctaggg | ccccgatgag | 660 |
| ctcctcacta | tacttgctga | cataggagta | gatctcattg | ggggcactca | acatgttgaa | 720 |
| actccacggg | gtgcaggcgg | gactgctcgg | cgagggtagg | cattcatggc | ctggctactg | 780 |
| gatggctggg | aaccttgccc | aaggctgcgg | nagnatcttt | ttcccccagc | tnttggnaac | 840 |
| ttgggggaagg | cccttgggca | taaaaagcaa | cttgggttga | anggggagggn | ctttgcccaa | 900 |

```

ccccggggct ttggacgttg gaacaagagt nccttgaagg gtttgggncc cccncaaaaa    960
ngcangcntc cgggaaagcc gcccttgggg gtgncaaaac cccnaactgg ggggttnttn    1020
aanc                                              1024

```

```

<210> 38
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 38
taccgccctc gcatccctag taacggccgc cagtgtgctg gaattcgccc ttccatccta    60
atacgactca ctatagggtc cggcgccgc cggggcagggt gccgcttttt tttttttttt    120
tttttttttt tttttgttcc acaactgttt attttaagct gaaacttcaa tattcattga    180
ttacctataa taatagttac tcataaatgt agttaataat taatataaaa aattattatt    240
tttaccattta tataaatctc tgaaaaatac caagttttga gaatatagagc aagaatttgc    300
ttanaaaatt gcaggaagcc tgaanaatct cagcatcagt caaagcagggt ncaacaaaaa    360
acaatttttag acattcattt tttgtcttaa gagtgcctaa aataaatgat cacagaatga    420
ataactgatg tatggcaaaa atgagtttaa aactatgtaa gctccaaggc cccaatgtgt    480
ataagaattc tttggaagga ttttgaagga ctgtaaatgt tgcaataaaa agtaaaaact    540
agtagttagg caatgngttt taaactatag ngtcacctac tgnctctctg gtgcctaact    600
gnattcttca acatcttctt ttcctttttg attagaaatc ctggctctacc tcaaaggttt    660
tgcattgntt tctagggaca tcagcaaaact ggtagaccat atgagaaaaca gaaataaaca    720
gtaattattat ctttagaaat taagcattat gtacncagtg agaaatggat tgacttgata    780
gaccttaaac ccttttcttc ctttcacacc ctttntagna ccacctaanng gtatccggat    840
tggggatggg gccccnctnt ggtaatcccc cttnagtcag gacagggggc cctaaggggc    900
caattttntt tcgaattaga gaaatncccc attttttggg ggggttgcaa gtnttanccc    960
anggcttgca aaggcttntt tttgaagana cncccaaacc cggggncttn tttttcngga    1020
atca                                              1024

```

```

<210> 39
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 39
tcgccccgagc agnangcnen agcggncnnc agtgtgatgg ttatngtgnn gnnttcgcnc    60
tnccatncta atnctactca ctatagggnn cntgngncnc nnggcnaagn ntnacnnntn    120
annngtgtaa ctgatatcat ntcnncnana ccatgggttac atnnanntag gtctcnnang    180
nataccangc tntgagagnt ngaccnggaa ntcgnttnga aannttgngc gangccngat    240
caatatccnc atcngncaca gcggntccgc aagctgacaa tncgtganat tnatnttgg    300
tttannganc nnttacangn atggnncccn gagatgcatg nnggagtatg gcaaagatgn    360
ntgtaaaact atgtaagctc naaggcccca atgtgnataa cagttcntgg nanggantnt    420
ganggantgt aagngntnaa nntnaangnn anannnaaga ggtangncat gagcccnaaa    480
ctgtagnnnt anctacagng cttanggcgc ctacctggga caggcnacgn cttcattaac    540
tttttgatta gaannacggg ggtaacncac nggttnngca tgggtccagta ggngcattgn    600
ccngcngggc aaccatatgc tngncncaa taaacgggtgc ttttancatc nnagattaaa    660
gctttttggc cacaggggna aaagnatggc ttganaggcc ttaaaccccc gtactcngtn    720
caccctcttn gagaaccncc taacgggatc tggaaatgng atggccccct nttgggaaac    780
nccctanaag anacctcngg ngacccttg nggcccattt tgangtttag nacngcaatt    840
tncccatatt tgnggttttt gccaaacctc agncatnggc tggcaatgga ntgnnttttc    900
caatagaanc aaaccccggn tnttttttgg ggggnatcag ggttaagggg nttggcaaaa    960
nnaaannggc ncnnngnaaa aatttttccc nggtntatcn aaanncccca aagcttttng    1020

```

caan

1024

<210> 40
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 40
nggacgcatg ctcgagcggc cgccagngng atggatntng tgcagaantc gccctttcat 60
gcctatgatc ccngcacttg gngaggccga ggatctcctc tctgggggat cacttgaggg 120
caggagttaa gagaccatcc tggccaccat gatgaaaccc tgtcncctact nnacatacag 180
gaagnagctg gncgngntgg cataactctta caatcccagc tacttggnag gntgangcag 240
ganaatcact ngnacctang aagcagaggn tgcantngnn ccaanancac accactatac 300
tntagcctgn acgacagagg tgntgataan agcnggaccc ctgactatat ncaggntttt 360
ctgacntnna nnancncatc taaatnctac gccgtntgag gtcgcntagg ttangtagnn 420
natnctnatt tatgaccaat atgntgtnan acggcntnnt gntnaaaant tntacagnan 480
ggcngnctac nttncttata atgnggaaaa cggtgncctga natncangtg nnnnngtccn 540
nttnntggna agaggnttng aaanncanca gtgcaccttn tgaactctac nagnagcttn 600
tgaagctaac naagcnttaa natnagatgg cntgntagga ctgtacnngc anggaaagat 660
tcacaaaact ggacattctt naccgagata ngntcttgct ttaccgggga ggacnnntcc 720
aaggntgtnt naagagggac agtcagctta gtnntgctng ggtagagaaa accangactt 780
natntgtgag cttgatnngc agaacctggn nanccttgga agagcntnga ttgncngat 840
ccctgaaagg gcnnncttna ccctatcggg gaccttnnna acctcttang tggcacgcaa 900
ggcacnaacc nggcncttt caagaatcnc nggaatcnag gccctttct tgggntnanc 960
cngnnnnncc cgttnagncc cncgggnaaa anntcttggg nntttccaat cccngngggn 1020
nttt 1024

<210> 41
<211> 1004
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1004)
<223> n = A,T,C or G

<400> 41
ggtnnnnntta atcatcgccn gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgcccttag cggccgcccc ggccaggact tcccaccact ggaaatgtta 120
gcataaaaaga acttgagag gaaaaaagta ttaacaaaac tgcagtctgc actctttaaa 180
cctgtttaag gctcttcac ctggttagca aaagggtgtga atgtaatgtg atggaattta 240
aaagttttat gagaccaggc acagtggctc acgactgtaa ttccagcagt ttaggaagcc 300
gaagtgtgca gatcacctga ggtccggaga ccagcctggc caacatgggtg aaacctgtc 360
tctactagaa atacaaaaat tagccagggtg tggcggcggg cgcctgtaac cccaactact 420
caggaggctg aggttagaga atcacttgaa ccagcaggc ggagggtgag gtgagtcgag 480
atcacgccat tgcactccag cctgtgacac aagagcgaaa ctctgtctca aaaagatttt 540
ataagaaagc agagcttttc cttgaagctc ttttgaagtg gtacgttaat tagtattttg 600
ntgaaaatac tttaaagatg cctagtgaag agcctactaa agtgctgtga aaaatggggt 660
ttanaacatt ttattttcan gctttatggc ctattttcca ttgnggcaag tgcaaaacta 720
ccctggccca aangaaggc agagaacata attacctctt anggcacatt tcattctttg 780
cagctttgct taatccagtn gctaagttct ttacctnaac cctgnaggna ttgaacntta 840
ttncatttn ngnaaaaggg tcacctntt nnnacaatnt tncannanct ttttnggaag 900
ttancnttg gccttaaaan ttnaaaantc cntntggnt tccctttatn ccccnangg 960
gnnnantang gnntggattt ttaangncc ttggccngaa cccc 1004

<210> 42

<211> 1020
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(1020)
 <223> n = A,T,C or G

<400> 42
 nnnnnnnnnn nnnnngattg ggccctctag atgcattgctc gagcgggcgc cagtgtgatg 60
 gatattctgca gaattcggcc tttagcgtggg cgcggccgag gtacctttga taattcctag 120
 acctctattt tcattctgtg tattaatgtg aataacagat ggatatttta atatttaagg 180
 cagatggtaa actttcctat aggtcttctg agacttcgtc ttataggctg aacaccattc 240
 acaaaatgta ataatgcttc attccttcag gttgaggtaa agaacttgag caactggatt 300
 agcaaaagctg caaagaatga aatgtggcct aagatgtaat tatgttctct gcccttcctt 360
 tggggccaggg tagttttgca cttgacacaa tggaaaatag gccataaagc ctgaaaaataa 420
 aatgttctaa accccaatct cacagcactt tagtaggctt ttcactaggc atctttaaaag 480
 tattttcaac aaaatactaa ttaagctacc acttcaaaaag agcttcaagg aaaagctctg 540
 ctttcttata aaatcttttt gagacagagt ttctgctctg tcgcacaggc tggagtgcac 600
 tggcgtgatc tcgactcacc gcaacctccg cctgctgggt tcaagtgtat ctctagcctc 660
 agccttcttg agtaagttn gaaacacagg gccccgncaa cacacctggc taaattttgn 720
 atttctagta naanaccagg ttttnancat gttggncaag gctggtcttc cggaaccttn 780
 angtgatctg gacacctttg gntttcctaa actgggtgga aattancagc gggaaccnct 840
 ggggcctggc tcattaaacc tttaaaatnc ctttccattc anttcncacc ttttggtaac 900
 cccgnatgaa aacccttnaa ccgggtttta agnangcnna nnnngggnat ttgtaaaact 960
 ttttcccnt tcgaagtcnt ttaagccaan nntttncng gnnnnnggan ccctnccggc 1020

<210> 43
 <211> 1020
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(1020)
 <223> n = A,T,C or G

<400> 43
 ggagnnnnnt aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
 gctggaattc gcccttagcg tggtcgcggc cgaggtaact ttactgctt tgtcttcaag 120
 gcctagtgtg ataattaaca tctagtatgt gtttgatgga tagccaattt tggcttcatt 180
 ggtatgtgtg taccacagtc attggtagag tcaatatatg aatgaagaaa gtataacaaa 240
 tttgccctct agtagagtag tttttttttt tttttttttt ttttggtttt tttttttttt 300
 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 360
 tttttttttt ngnnnttttn ncnttttttn aannaaaaan cggcccnann accnncnnc 420
 nnnntttttt nncnggccnn ccnggnttng gggngggggn cnttnngggc cnnngggnnc 480
 cttttttccn naagggtttt ggggttttng gggnaaant tnggnncnan nnnnggccna 540
 aaaaanttnn gncnnanaan cgcnnnttcc nannnttnn cnttggggcc caaaaanttn 600
 cnaaccccn tgggcnnaaa gggcnttgnt ttttttgggg nccccnaaac canggggggg 660
 cnaaaaaaat gnccttgaa ntttttaaaa aacctntgg naaaancccc nnggggtccc 720
 cennnnnccc ttanttttnn acanaanggn nnaaangggg ncccnnaaaa naccttngg 780
 ggccnttttt tnacaaattt ggggnttttn aaagggtttt tnnngggggc cctntatncc 840
 ccnaaaaang aaagggnnnc ccccccnnn nnnnnnnncc cnaancccc ggnnnntttt 900
 ccnggggggg ccnnnaaaa gggggnaant ttnggnaaan nccnnnnncc ggggggnccn 960
 ttnaaanntc nntttnanng gggcccnnnn nccccnnnn annngggggg nnaaaaaccn 1020

<210> 44
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 44
nnngnnnnnn nngattgggc cctctagatg catgctcgag cggccgccag tgtgatggat 60
atctgcagaa ttcgcccttt cgagcggccg cccggggcag tacgcggggc tcggcgctgc 120
ctacggaggt ggcagccatc tccttctcgg catcatggcc gccctcagac cccttgatga 180
gccaagatc gtcaaaaaga gaaccaagaa gttcatccgg caccagtcag accgatatgt 240
caaaattaag cgtaactggc ggaaaccag aggcattgac aacagggttc gtagaagatt 300
caagggccag atcttgatgc ccaacattgg ttatggaagc aacaaaaaaa acaaagcaca 360
tgctgcccag tggcttcggg aagttcctgg tccacaacgt caaggagctg gaagtgcctgc 420
tgatgtgcaa caaatcttac tgtgccgaga tcgctcacia tgtttcctcc aagaaccgca 480
aagccatcgt ggaaagagct gcccaactgg ccacagagat caccaacccc aatgccaggc 540
tgcgagtgga agaaaatgag taggcagctc atgtgcacgt tttctgttta aataaatgta 600
aaaactgcaa aaaaaaaann nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 660
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn aancennnnn aaanannnnn nnnnaaaaag 720
gcttntttta angggcaaat tgggaaacct ttttnattca aaaatggctt ttncanngga 780
ctggggacca nnttncceng gggnccaaaa ttgggntttc ctttaanccc nttnnnaaan 840
gggaattttt ncccttgggc cttgaaaaac naagcnnnna aaaagncctt tgggnnggaa 900
acccttttng ggggaatttc cncncnttg ggggggcnnt nttnnnnggg acccnanttg 960
gncccaantt ttgggggaaaa nnnnggnnaa aaagggnnnc cctgggggaa aatgttnccc 1020
ccca 1024

<210> 45
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 45
ggagnnnnntn aatcatacgc cagcttggtg cagagctcgg atccctagta acggccgcca 60
gtgtgctgga atctgccctt tcgagcggcc gcccgggcag gtacggcgca ttttgtgcac 120
acaaaatgtg cgcacacaca cacacagaca ctctgcaca tggcctgtta 180
aagaactaca agggaggtgg gacgcgggaa agtgatggg gtgggtttgc atcgtctcat 240
cattgattct tctcatattt ttctctgatt agagaaacta aagagaattt tgtgagaaag 300
gcttgaaagt taatgagtta cttctaccaa agtgattaca agcagaaatc ctcagatgct 360
gtagagatgc tgaccacac atccttagct caaggaagcc cctcgatta gtcaccttca 420
gccatcagca gcctccacca ttaaccccag tgtgctgtat aaaaaatact ttctacatgt 480
gccccaaattt gaaaagttag gaagcactga tttcaaagca aatcattcac atttgaactg 540
tcttcagtgt acctcgcccg cgaccacgct aagggcgaat tctgcagata tccatcacac 600
tggcgggccgc tcgagcatgc atctagaggg cccaattcgc cctatagtgga gtcgtattac 660
aattcacttg ccgtcggttt tacaacgtcg tgactgggaa aacccttgcg ttacccaact 720
taatcgnent ggagcacatt cccnttttgg ccnactggcg taattaacca aaaaggnccg 780
gaccgaatcg gccntttcca acaagtggg ccaacctgaa tnggcnaaan ggcccccccc 840
tgtaaccggn gccattaaac ccccgncggg nnnntngggg taccaccaac ggggaccggt 900
taacttggcc anggccttaa gggccggtcc ttttggtttt ttncctttcn tttttngccc 960
ntttncnngg nttttcccg n aaagntntaa aaaggggggg tccccnttta ggggtcccaa 1020
taaa 1024

<210> 46
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)... (1024)
<223> n = A,T,C or G

<400> 46

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|------|
| nnngnnnnnn | nnnnnnngaa | ttgggccctc | tagatgcatg | ctcgagcggc | cgccagtgtg | 60 |
| atggatatct | gcagaattcg | cccttagcgt | ggtcgcggcc | gaggtaact | gaagacagtt | 120 |
| caaatgtgaa | tgatttgctt | tgaaatcagt | gcttcctaac | ttttcaaatt | tgggcacatg | 180 |
| tagaaagtat | ttttataca | gcacactggg | gttaatgggt | gaggctgctg | atggctgaag | 240 |
| gtgactaatg | cgaggggctt | ccttgagcta | aggatgtgtg | ggtcagcatc | tctacagcat | 300 |
| ctgaggattt | ctgcttgtaa | tcactttggt | agaagtaact | cattaacttt | caagcctttc | 360 |
| tcacaaaatt | ctcttttagt | tctctaata | gagaaaaata | tgagaagaat | caatgatgag | 420 |
| acgatgcaaa | cccacacat | acactttccc | gcgtccacc | tcccttgtag | ttctttaaca | 480 |
| ggccatgtgc | aggagtgtct | gtgtgtgtgt | gtgtgtgtgt | gtgcgcacat | tttgtgtgca | 540 |
| caaaatgcgc | cgtacctgcc | cgggcgggcg | ctcgaaagg | cgaattccag | cacactggcg | 600 |
| gncgttacta | agtggatccc | gagctcggta | ccaagcttgg | cgtaatcatg | gncatagctg | 660 |
| nttcctgtgt | gaaattggta | tccgctcaca | attccacaca | acatacagag | ccggaagccn | 720 |
| taagtgtaaa | agccctggg | tgccctnatga | gtgagctaac | tccattaaat | tgcttgccg | 780 |
| ctcactggcc | ggtttcagt | cggnaaanct | gcggnnact | gcantaatga | atcggncaac | 840 |
| gccccgggga | aaaaagcgg | tgcaattgg | gcctntttc | cctttcttgg | ttaatggact | 900 |
| ccntnngnct | tnggccntt | ggnttngggn | naacgggatt | aanttnnntt | naaagggggg | 960 |
| naanacgggt | ttncnana | aatcnggggn | aaacccccng | gaaanaaacn | ttggncccaa | 1020 |
| nggc | | | | | | 1024 |

<210> 47
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)... (1024)
<223> n = A,T,C or G

<400> 47

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|------|
| ggngnnnnnn | aaacgccagc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gcccttagcg | tggtcgcgcc | cgagggtgcat | ctgaacattg | ccaagcccta | 120 |
| ggacattccg | tagagcttgg | ggattctgga | ccaattgggt | cagacaggac | acgaaatgcc | 180 |
| tgtttgatgg | gttctgcaat | taaacacca | actactctct | tttcatcaga | tataaaaaga | 240 |
| aaagttttta | ttttgtttgg | acatttagga | acaacttgct | ggaagcccaa | ttcattatca | 300 |
| acaagtctt | ggacatcttc | tacctttttg | atagcaaagc | ttggatcatg | tggcagaacc | 360 |
| aacacgattt | tcccatccca | aaactctgct | actacacgtt | ctttcttcca | accacatat | 420 |
| ttgattccct | ccagaaacct | gtggtgatgc | tgtacctgcc | cgggcgggca | gggcgaattc | 480 |
| tgcagatata | catcacactg | gcggccgctc | gagcatgcat | ctagagggcc | caattcgccc | 540 |
| tatagtgaat | cgtattacaa | ttcactggcc | gtcgttttac | aacgtcgtga | ctgggaaaac | 600 |
| cctggccggt | acccaactta | atcgccctgc | agcacatccc | cctttcgcca | gctggcgtaa | 660 |
| taagcgaaga | ggcccgcnac | gatcgccctt | tccaacagtt | gccgcagcct | gaatggcgaa | 720 |
| tggacgcccc | ctgtanccgg | cgcattaaac | cgcggcgggg | tnnttggggg | acccnccacg | 780 |
| gggaccggta | cactttgnca | agggccctaa | cggcccggtc | cntttcgctt | tcttnccttt | 840 |
| cntttnttgg | ccacgttngn | ccgggttttc | cccgtnaagc | ttttaaaatn | gggggcttcc | 900 |
| cnttttaggg | gttccnaatt | aanggcttta | cgggaccctt | gacccnnaaa | aaactttnnn | 960 |
| tttnnggggg | gnngggntnc | ccntaggggg | ccattgnccc | ttgnnaaaaa | anggtttttt | 1020 |
| nncc | | | | | | 1024 |

<210> 48
<211> 1017
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)... (1017)
<223> n = A,T,C or G

<400> 48
gnnnnnnnga ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttgccgc ccgggcaggt acagcatcac cacaggtttc tggaaggaat 120
caaatatgtg gggttgaaga aagaacgtgt agtagcagag ttttgggatg ggaaaatcgt 180
gttggttctg ccacatgac caagctttgc tatcaaaaag gtagaagatg tccaagaact 240
tgttgataat gaattgggct tccagcaagt tgttcctaaa tgtccaaaca aaataaaaac 300
ttttcttttt atatctgatg aaaagagagt agttgggtgt ttaattgcag aacctcatca 360
acaggcattt cgtgtcctgt ctgaaccaat tgggtccagaa tccccaagct ctacggaatg 420
tcctagggtt tggcaatgtt cagatgcacc tcggccgcga ccacgctaag ggcgaattcc 480
agcacactgg cggccgttac tagtggatcc gagctcggta ccaagcttgg cgtaatcatg 540
gtcatagctg tttcctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc 600
ccggaagcat aaagtgtaaa gccctggggt gcctaattgag tgagctaact cacattaant 660
gcgttgccgt cactggccgc tttccagtcn ggaaacctgt cgtgccagct gcattaatga 720
atcggncaac gcgcccggga aaaagcgggt gcgtaattgg gcgctcttcc cgctttcttg 780
nttacttgac tccttgggct tcggccgttc ggntgcggnn aacggnattc aacttactca 840
aaaggcggnn atacggtatt ccngnaatc nggggataac ccccggaaan aactttgacc 900
naaaggcccc caaaaggccc ngaacccgna aaaaagggcn cgnnnnnnnn ggggtttcct 960
aaggttccgg cccctgggn aggtttccca aaaatngnnn ccttnnnnn nnnnnng 1017

<210> 49

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 49
ggngnnnnnn anaatnaaacg ccagcttggt accgagctcg gatccctagt aacggccgcc 60
agtgtgctgg aattcgccct tgagctggcc gcccgggcag gtactgaaat tactctgaat 120
tcagaaatgt aagtatatgc agctaggtca taaagacact gctttagaga agacatgtat 180
tagtggaatg gaacaggtaa catctttgag aagtcaatga gttctgcatg cagggatttc 240
accatcgga tgaaggcaag aatgatgcct gcctgtgtgc ttctcagagg acgtataaag 300
ccactgagga tgagtgtctac agtgcttggt aattgtgggg ccacagacat ttaagttggc 360
attgcttttc tcctcctctg cttaatccac ctttataaat atggcagatg gcttaagaca 420
ggcatcatca gcatctctgg agatgtgggc tcagagggca agtggggggc gtgggggttt 480
ccactagagg gaggaagtt tctgtttccc atgtgttagt ttagattgtc tttgtgcttc 540
accagaaaag aggtagagtg cgcaccttca cactaagagc ccgaaattgt gggtcagtag 600
tttttttttt ttnntttttt tggtnntttt tnnnnnnnnn nnnntnnnn ngnnnnnnnt 660
tnnnntnnnn ngnnnnnnnn nnnnnnnnnn tttntntnng nnnncnctn nnnnnnaann 720
nngnnnnann ncnnnnnnnn tngnnnnnnn nnnncnttn ngggnnnang ncccnannnn 780
nccnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnccnannn nnnnnntnn 840
nnnaanncnn tnnnnnnnnn nnnngnnnnn nnnnttnnan nnnnnnnnnn nngnnnaann 900
nnnnnnnnnn nnnnnnnnna annnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 960
nnnnnnnnnn nnnanngggn nnnncccnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntt 1020
nngg 1024

<210> 50

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 50
ggagnnnnnn nntncngant gggccctcta gatgcatgct cgagcggccg ccagtgtgat 60

```
ggatatctgc agaattcgcc cttagcgtgg tcgcgggcga ggtacactga cttgagacca 120
gttgaataaa agtgacaccc ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaanaana ntaaaaaaa tttnaaggta aagntnnenn ntnaaaatct tttaggggna 300
tcnntatann nnttttcggn tntttnnngg ntngnccctc nntnccnnnt ttttnggna 360
anccnaann cccngnctta ccnntatgng cananttaaa anggtncntt nttngnggga 420
nctcannncc cccgccnttt tnttngggg ggntttncca nngnggggna aatgcncngc 480
tnatnaanan gggnttnntc cnaaatngn naancctga gngngnaanc ntntgggnt 540
tnntncgat tnnngnaccc ccncngcag anntcntgn nnccttantn ccgggggnta 600
nacccttctt ttaaaancnc nntgntntna aaaannnttt ncctgancna tcgggntaaa 660
ncnnnttttt tgaaaaccnn ggcttttttn aanangctcc gntnggcnaa ctttggggaa 720
naagggnnttt ttttaaggcct tgcttttttag ggccanccta angnggannn ncngttgnt 780
tgnnngatgg tttttagggn tccccgggtg ggacctntt tggggggaaa ttttggncn 840
aggggntccc cttnaagaaa tccnnnttcc nggncncnaa ttncnnaaa aattnngggn 900
ccnaannntt tnattgggaa ggncccttgg ttgccccnt aaanggnccn naaaccttta 960
aaangggggn gcntttaatg gncctttcn ggncccnaaa aaanggggnc ccccnnttt 1020
nagg 1024
```

```
<216> 51
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G
```

```
<400> 51
gngnnnnntt aactcccgtt tggtagcgag ctcgatccc tagtaacggc cgccagtgtg 60
ctggaattcg cccttagcgt ggtcgcggcc gaggtacttt tttttcttt tctttcttt 120
tttttttttt tttattttt gagatggagt tttgctcttg ttgccacgc tggagtgcaa 180
tggcgcaatc ttggctcatt gcaacctcca cctcccggat tcaagcgatc cttctgcctt 240
agcttcccaa gtagctggga ttatagacgt gtgccacat tccagctga tttttgtatt 300
tttagtagag atgggggttc accacgttgg ccaggctagt ctggaactcc cgacctcatg 360
tgatcctccc accgcagcct cccaaagtgc tgggattaca ggcgtgagcc accatacccg 420
gttgattgta gacttttgat tggattttac aaggacccat gagaggcaac aaagagaagt 480
tgtaagaga acagaccctg agaccaatag tttggctcaa gctctggctc cctaacttcc 540
taccagtttg accttgggca agttacctaa catctttgtg cctccatttt ctatttgtaa 600
aaggaaacta atagtagtgc ctactttata atagagtat taaaaatatt aaatgagtta 660
atatttgtaa agtaattaga aaaatgcctg gcacttcaaa agcagccttc atttattctt 720
tggaataaat tttaatgaa ttcaagggtt atatgtagct tttaggcata tatnccataa 780
tggcactgta aaactgcana aatatccgat ctttaaaaat ttttgggtaa atttatcata 840
atatggnaac caaatcccat ttaatggctt ttaggggtan ccgatnaaaa cngaagttt 900
gcagtttaag ccncttatgg aangggaccc gaaattccaa gganccannn gggaaaaaac 960
cccnngagga atnttggccg nttaantta aancctttgg gtnntttaag nncctaaaaa 1020
nttt 1024
```

```
<210> 52
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G
```

```
<400> 52
gngnnnnntt tnnngntcng antgggccct ctagatgcat gctcgagcgg ccgccagtgt 60
gatggatatc tgcagaattc gcccttcgag cgccgcccc ggcaggtact tcaaaactat 120
tcataagcaa aaatcagtgt caaaaatatt tagtaactta aaaaaaacia aaagtataag 180
```

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| tagagacgga | caagaactcc | tectgcttcc | tcccactggg | ctcatcgat | ttctgttcca | 240 |
| ttacataaga | gactaaaact | gacaaaactct | gttttatcgc | taacaccta | aagcaataaa | 300 |
| tgtgatttgt | taccatatta | tgataaaaatt | taacccaaaa | attttaaaga | tcggatattc | 360 |
| tgcagtttac | agtacattt | atgtatatat | gcctaaaagc | tacatataaa | ccttgaattc | 420 |
| attttaaaatt | atttccaaag | aataaatgaa | ggctgctttt | gaagtgccag | gcatttttct | 480 |
| aattacttta | caaataattaa | ctcatttaatt | atttgtaata | actctattat | aaagtaggca | 540 |
| ctactattag | tttcctttta | caaataaaaa | atggaggcac | aaagatgtta | ggtaacttgc | 600 |
| ccaaggtcaa | actggttaga | agttagggag | ccagagcttg | agccaaaacta | ttggtctcag | 660 |
| gggtctgttc | tcttgacaac | ttctctttgn | tgctctctcat | gggtccttgt | aaataccaat | 720 |
| caaaagtcta | caatcaaac | gggtatgggg | ctcacgcctg | taatcccagc | actttgggga | 780 |
| ggctgcggtg | gggaggatcc | ccatgaggt | ncggagttcg | agactagcct | gggccaacgt | 840 |
| ggnggaaaacc | ccatctntac | taaaaattcc | aaaatcanct | ggggaaggng | ggcacacgtc | 900 |
| tataatccca | cttccttggg | aagcttaagg | ncnnaaggac | gcttggaaac | ccggaanggn | 960 |
| gnggttcaat | ggancccaaa | atgngccatt | ggnctttcnc | gngggccaac | angagccaaa | 1020 |
| ntcc | | | | | | 1024 |

<210> 53
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|-------------|-------------|------------|------|
| gggnnnnnnn | tnncttaacg | cccgnnttgg | accgagctcg | gatccctagt | aacggccgcc | 60 |
| agtgtgcttg | aattcgccct | tagcgtggtc | gcggccgagg | tacattactt | ggtgttaaca | 120 |
| ttgttggcag | tggtagcccc | ttttcagaaa | gcaacttgct | gtaagtcagg | gtgtccgttc | 180 |
| caaccttcag | ctagtgaaaa | ggtagtaaca | aatgggtaaac | aagagaatga | ttgtttaaac | 240 |
| ctatctgtgg | acacttaatg | caactgttta | aaaatgataa | tcacgagtta | tgtagcaacg | 300 |
| tggaaatata | tttacagaac | attaagtggg | gaaagcagga | cacgaaagta | tatttatact | 360 |
| acagttataa | ctcaacagtt | catttatatg | ctgttcattt | aacagttcat | ttaaacagtt | 420 |
| cattataact | gtttaaaaat | atatatgctt | atagtcaaaa | gctgttgtgg | tggtgtgtgt | 480 |
| gtaggcttat | agttgagcat | tattttctta | aatttcttga | atgttcttta | tggtagtgtt | 540 |
| actaaaaagt | ttatgatcac | attttcattg | tgaacataat | ttgaactcat | tatcacacac | 600 |
| ttggaaaata | cagaaaagtg | gaggaaaaaa | aatcatatcc | ccaccatcca | aagacatata | 660 |
| ctctctctct | atcttgntca | ttcttggttc | tgngcacagg | tttatgatta | taactngtgc | 720 |
| aaaatgtata | ttcaaaatag | ctggtagcatt | acctttgngg | nattatgggt | aaatctttca | 780 |
| ctttaatttt | ttcaaaggtc | cctatnataa | tggcccggtg | aaccgnggga | tttaaggggg | 840 |
| ctcccatggn | gggcataatn | cataccnnga | ggaaaaattn | naaaatttaag | gnaantattt | 900 |
| ttaaaaaatt | ncctatattt | cccaaaacct | aacaactact | ggtaaaaaatn | ttggaccggn | 960 |
| tccccctatt | ntnggttaan | ggccccacct | ttgggnaaaa | ccggggtnaa | aaattggggc | 1020 |
| ctaa | | | | | | 1024 |

<210> 54
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggagnnnnnn | ttngtitttg | gccctctaga | tgcattgctg | agcggccgcc | agtgtgatgg | 60 |
| atatctgcag | aattcgccct | ttcgagcggc | cgcccgggca | ggtacttttt | tttttttttt | 120 |
| tttttttttt | ttacatttat | gcatacttat | cactaacacc | ctaataatca | cagactagtg | 180 |
| cacagatcaa | gatgttaaca | gttaattgtt | gttgggtgtt | gggaatatgt | gtgaattttc | 240 |
| tttactgaat | ttccaaagtt | ttgtatgagt | atgtattata | tttgtaatgg | aaaatacata | 300 |

```
cataaaattt attacaaaa caccaaaagat tatttaagga atttgagaca aaatatattaa 360
ccaaattccc acaatgacaa cactatttta gttattttcc acatcttttc atttaagact 420
ttatgcacac atatttaaca ctgttatcac aagcgtgtgc actgaaacaa gatagaggaa 480
acagatcaag atgttagcag tagttgttag gtgttgggaa tataggtaat tttttaaaat 540
aatttacttt attttctaatt ttttcctctg ggtagtatt atgcacacca atggagacac 600
acataatata ctgttatcag gacattatta tagggaacat ttgaaaaaat taaagtgaaa 660
gtatttaacc ataattccac aaaggtaatg taacagctat tttgaatata cattttgaca 720
cagttataat cataaacctg tgcacagaaa cnagaatgaa cnngattaga ngagagtata 780
tgtcttttga tgggtgggat atgaattttt cctncacttt tctggatttt nccagtgtgn 840
gaaaaatgag ttccaaaata tggtcncaat ggnaaatgng ancntnaacc ttttagtanc 900
ccttnccctn aggaacattt caggaaantt tannaaaata anggctcaac ttttaggcct 960
acannancaa ccccncaaaa ggnntttgac tntttanccn tntatatttt taaccggttt 1020
taan 1024
```

<210> 55

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 55

```
gnngnnnnnn ttaactccag ctgtgtaccg agctcggatc cctagtaacg gccgccagtg 60
tgctggaatt cgcccttagc ggccgcccgg gcaggtagct cecatgggaa acatgggaag 120
taaaaccacc tgaggagcct ctgatgggtg agtcaggctg ttcctcgaag agtaggctgt 180
gactgccaaa cttttagggt taaggagtat ttataatgat ctttgaggaa actgcaactg 240
acaattgagg gaaaaaaatg ttagttcatg actgcaaaat acatgacaga atcacaaaaa 300
ctattttaca agtttaaaaa acaaacctga tgctgatgca tggcaggcga accccaaagt 360
ggggcttagc ctgcaagggt tcttggtctc acccaggaaa ggattcaagg gcaagccagt 420
ggtaagggtg aagaaaaacac ctttatcaaa gcaacactgt tacagctcct gtggggtcac 480
agctcagtga ctgctcccag ggttgcccca taggcagggt gccgagagta gcagctgagc 540
ccagttttgc agtcatatgt atacctactt ttaattacat gcagattcag gggtagtttg 600
cgcagaaatt gttaggaaaa gggtaggtaac ttttgggtca tcagggtcatt gccgcttaaa 660
gtggtggtta tgcctgagtt ttgccatggc aatggtaaac tgacaaggca cgctgcttgg 720
tgtgtcttac agaaagctgc ttncgctctg nccttggtta nctagccctc gancntttgg 780
ttgtaaatga accaagagaa gtcaccggcc cttggcgctt tcttcccaga agtacccttg 840
ggccggggaan cacgcttaag ggccaaattc ttgcagatat ccatnacact tggcnggncc 900
gnnttcancct tgcattttta aagggcccaa tttgnccctt taaanggagt cgantaccaa 960
ttnnntggg cgcgctttta acaacgtnnn ggacttggga aaaanccttg ggttacccca 1020
antt 1024
```

<210> 56

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 56

```
gnagnnnnnn ttngtttnc gantgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtagt tctgggagaa 120
aacgccagg ccgtgactct ctgtctcatt taaaaacaaa agatcgaggg cttagctaaac 180
aaggacagag cggaagcagc tttctgtaag acacaccag cagcgtgcct tgtcagttta 240
ccattgccat ggcaaaactc aggcattacc accactttca gcggcaatga cctgatgacc 300
caaaagtac cacccttttc ctaacaattt ctgcgcaaac caccctgaa tctgcatgta 360
attaaaagta ggtatacata tgactgcaaa actggggtca gctgctactc tcggcaccct 420
```

```

gcctatgggg caaccctggg agcagtcact gagctgtgac cccacaggag ctgtaacagt 480
gttgctttga taaaggtgtt ttcttccacc ttaccactgg cttgcccttg aatcctttcc 540
tggtggaagc caagaaccct tgcaggctaa gcccactttt ggggttcgcc tgccatgcat 600
cagcatcagg tttgnttttt aaacttgtaa aatagttttt gtgattctgt catgtatttt 660
gcagtcatga actaacattt ttttccctca attgcaagtt gcagtttcct tcaaagatca 720
ttataaatac tccntaacc tacaagttt ggcaagtcac agnctactct ttgaggaaca 780
agcctgactt accatcaaga agcttcttn anggggntta cnttccatgg tttcccatgg 840
tgaaggancc tgncccgggc ggccgnttaa gggcgaaatt caacacactt gggngggcgn 900
tnnnntaang gatccnaact tggganccaa annnttgggg naaannatgg gnnnnnaact 960
ggnnnccggg ggggaaaatg gtatnccgnt tccaatttcc ccncnanntt tnnaancccg 1020
gaan 1024

```

<210> 57
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

```

<400> 57
gngnnnnntt nantnaacgc cagcttggtgta cggagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt agcgtgggtcg cggccgaggt actcatcact gacttgaagc 120
ttagtatctg gcttccttaa ggatgtaact ttcatgtaac agattaataa cttatatgaa 180
aaccaacaca accatatggt tagggctgga aagggccatg acgcctgggtc atttttcttg 240
ttttacctta ctcttatgtg tgtcacactt catcaattcc ggaaacagtt tctggagatc 300
tcctcattac ctctttttaca atcacctcac tccagcatgg tgtctgttac ctctccac 360
ttgtgacaat gtctagtaag gtccactctc cattctgtgt gatgaccact tattacaacc 420
ctcagaatag gggacagtgg tgtgccccct gcaatacaat ggtttctatc tcctgatact 480
tttattacac ctctagcagg atgtcttctg atcctcctta ttgatttttc cctcacgatg 540
atgaacaatt atctcccgtt actcacctag cagtatctaa ctgtccctaa cacagcatgt 600
gggaatgccc tcaatacggg ggatgctgnt aactttcttc ctccccctca ggcaatggcg 660
gtgacttaca atgaaccata atggccacat ttcccaactg nattttgga cctcttctgn 720
ccccctcttt ctagganccc agttaaaaaa aaaaaaccaa aactagcccc aatgnctgtg 780
atgcccatta atcacttacc cagggtctgan ccctncatta aanttttgat gggatctctt 840
tggnttccca attggccgtt naacccaagn ctgntggatt cccaanttnc cccattgntt 900
taatgcggtt cccttaanca ncccttgnt actggacctg gccngggngg gcccttttaa 960
aaagggcaaa ttntggagaa aatnccttnc acttgggggg ccnttnnaac atggcntttt 1020
aang 1024

```

<210> 58
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

```

<400> 58
gngnnnnntt nngtttggcc ctctagatgc atgctcgagc ggccgcccagt gtgatggata 60
tctgcagaat tcgccctttc gagcggccgc cggggcaggt acagtagcca agggtgacta 120
aggaaccgca tgaagcaatg tgggaaattg ggaatcagca gacattgggt taacgggaca 180
atggggagcc aagagatacc atcaaaattt aatggagggg tccagactcg tgttagtgat 240
taatgggcat caacagacat tgggctagtt tttgtttttt ttttttaact ggggtcctag 300
aaagaagggg acagaagagg ttccaaaata cagttgggaa atgtggacat tatggttcat 360
tgtaagtcac cgccattgcc tgaggggaag gaagaaagtt aacagcatcc accgtattga 420
gggcattccc acatgctgtg ttagggacag ttagatactg ctagggtgag aacgggagat 480
aattgttcat catcgtgagg gaaaaaatcaa taaggaggat cacaagacat cctgctagag 540

```



```

gtgtaataaa agtatcagga gatagaaacc attgtattgc agggggcaca ccactgtccc 600
ctattctcgag gggttgaata agtgggtcatc acacagaatg gagagtggac cttactagac 660
attgtcacaa gtgggaagag gtaacagaca ccatgctgga ntgaggtgat tgtaaaagag 720
gtaaatgaaga gatcttcag aaactgtttc cgggaattgat gantgtgacc cnccttaaga 780
ntaaggtaaa acaggaaaaa tggncaggc gtnatnggcc cttttcagnc cttaaccttt 840
attggtgggg tggtttcata taagtantt aatctggtnc cctgaaagt ttccttcttt 900
anggaaaccc gantcctaan cctttnaagt ccnnggatga gacccttggn ccgggaaccc 960
cccttaaggg cgaaattccn ncccacttgg gngggccntt nncttaaggg acccaacttg 1020
ggcc 1024

```

```

<210> 59
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 59
gagnnnnntn taactcccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgagggtacct gggtttcttt caactcttca 120
atttcccatc ttccatcgta tattgaaatt tcctcatcca tgtcatcttt ctttgctttt 180
gataagacc atccagccaa cttccacta tcaaaagttt ctgaaaata tacttctcct 240
ataggttgag gtgtcttata tttaattctt gaggaagtt cactttcatt aacatcaatt 300
tcttctgaat tttcttcaaa gtcttcgctc tcaacatcat catccataaa ttctgcatta 360
attgagatga acagaagacc caaacataac caaaaggctt ggaaatgcat attgattatc 420
tctcttgccg cctgttttcg gcagtgcacag ctcatgatgc caagtcgttg ccacttggtc 480
cccgctctc ttccagaccag tccccccgc gtacctgccc gggcgggccgc tcgaaagggc 540
gaattctgca gatatccatc aactggcgcg ccgctcgagc atgcatctag agggcccaat 600
tcgccctata gtgagtcgta ttacaattca ctggccgctg ttttacaacg tcgtgactgg 660
gaaaaccctg gcgttaccca acttaatcgc ctgacgac atcccccttt cgccagctgg 720
cgtaataacg aaaagcccg accgatcgcc cttccacag ttgacgagct gaatggcgaa 780
atggaccccn ccctgtancg gcgcattaan ccncngcng gttntgggg taccaccaac 840
ggggaccggt acactttgnc aagggcctaa cgnccggttc ntttgggttc ttncccttcn 900
ttntngcac gttngnccgg ntttcccggt naagctttaa aatngggggc tccccctttt 960
angggtcen aataaagggt ttacggganc ttgaaccccc aaaaaacttt gnnntnaggg 1020
ggga 1024

```

```

<210> 60
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 60
gnnnnnttn ngttncngaa ttgggcccctc tagatgcatg ctgagcggc cgccagtgtg 60
atggatatct gcagaattcg ccttttcgag cggccgccc ggcagggtacg cgggggggac 120
tggctctgaag agacgcgggg accaagtggc aacgacttgg acatctgagc tgtactgac 180
gaaaacaggc cgcaagagag ataataata tgcatttcca agccttttgg ttatgtttgg 240
gtcttctgtt catctcaatt aatgcagaat ttatggatga tgatgttgag acggaagact 300
ttgaagaaaa ttcaagaaga attgatgtta atgaaagtga actttcctca gagattaaat 360
ataagacacc tcaacctata ggagaagtat attttgcaga aacttttgat agtggagggt 420
tggctggatg ggtcttatca aaagcaaaaga aagatgacat ggatgaggaa atttcaatat 480
acgatggaag atgggaaatt gaagagttga aagaaaacca ggtacctcgg ccgcgaccac 540
gctaagggcg aattccagca cactggcggc cgttactagt ggatccgagc tcggtaccac 600
gcttggcgta atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc 660

```

| | | | | | | |
|------------|-------------|------------|------------|-------------|------------|------|
| cacacaacat | acgagcccg | aagcataaag | tgtaaagccc | tgggggtgcct | aatgagtga | 720 |
| ctaactcaca | ttaaatagcgt | tgcgctcact | ggccgctttc | cagtcnngaa | accctgtcgt | 780 |
| gccagctgca | ttaatgaatc | ggccaacgcc | ccgggggaaa | aagcggnttg | cgtattgggc | 840 |
| gctcttccct | ttcttgntta | cttgactcgc | ttgggcttcg | tcgttcggct | gcggcnaacg | 900 |
| gnatcagctt | actcaaangc | gggaaatacg | gtantcccca | gaatccnngg | gattaccccn | 960 |
| ggaaaagaac | ctgtgagccn | aangggcccc | aaangggccn | gaaccntaaa | aaangggccc | 1020 |
| tnnn | | | | | | 1024 |

<210> 61
 <211> 1024
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|-------------|------------|-------------|------|
| <400> 61 | | | | | | |
| gggnnnnnnt | tncttacacg | cccgcttggt | accgagctcg | gatccctagt | aacggccgcc | 60 |
| agtgtgctgg | aattcgccct | ttcgagcggc | cgcccgggca | ggtacaaatg | gttttatgtc | 120 |
| accaattttg | ctgcaagaat | gggaactgct | tttaaatctg | taaatagctc | ttaacatttg | 180 |
| ttgtatgcac | ttcttttcta | ctatggctgt | caacacttgt | gtagggttta | atttctaaat | 240 |
| tggtggcatg | ttctttttct | caggctattc | agaagtaaca | acatttttca | tttcagacat | 300 |
| gcaatcacct | attaatgatg | aaatatattta | ccactttggg | aatatttaat | tagtttagtc | 360 |
| atggagaata | cttcccacat | tttaagattt | ttcaaatac | actgtcattt | ctatttttagc | 420 |
| attttatcaa | attattgctt | ttttatttta | taataaggct | taagacagat | tatagacctc | 480 |
| cttaagagat | gagtttcttc | ttctaaaaat | gcatgttgat | agaggactat | ttaggctaata | 540 |
| cggaggaatc | attaagaaag | aaagttttaa | cactgtttat | ccctatctgc | tttccttgca | 600 |
| ctttttctgt | gaaaaatatt | ttctgtttgc | aaaatcttcc | ctgagttctg | aaccagcac | 660 |
| catcagtacc | tcggcccgca | ccacgctaag | ggcgaaattct | gcagatatcc | atcacactgg | 720 |
| cggccgctcg | agcatgcac | tagaggggcc | aattcgccct | atagtgaagc | gtattacaat | 780 |
| tcactggccc | gcgnttttac | aacgtcgtga | ctgggaaaac | ccctgcgtta | cccaacttaa | 840 |
| acgcccttgc | agcacatccc | ccttttgnc | aantgcgtaa | ttaccaaaaa | ggcccgnaac | 900 |
| gaacggcctt | ttcccaaagg | tggcncaacc | ctgaaatggc | aaatggggcc | cccccttgaa | 960 |
| ccgngccnt | taanccccc | nccgggnntt | tnggggtccc | cccacggnga | nccgttaaac | 1020 |
| ttgc | | | | | | 1024 |

<210> 62
 <211> 1024
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|-----|
| <400> 62 | | | | | | |
| gnagnnnnnn | ttngnttgg | gccctctaga | tgcagtctcg | agcggccgcc | agtgtgatgg | 60 |
| atatctgcag | aattcgccct | tagcgtgggc | gcggccgagg | tactgatggg | gctgggttca | 120 |
| gaactcaggg | aagattttgc | aaacagaaaa | tattttttcac | agaaaaagtg | caaggaaagc | 180 |
| agatagggat | aaacagtggt | aaaactttct | ttcttaatga | ttcctccgat | tagcctaaat | 240 |
| agtcctctat | caacatgcat | ttttagaaga | agaaactcat | ctcttaagga | ggtctataat | 300 |
| ctgtcttaag | ccttattata | aaataaaaaa | gcaataattt | gataaaatgc | taaaatagaa | 360 |
| atgacagtga | tatttgaaaa | atcttaaaat | gtgggaagta | ttctccatga | ctaaactaat | 420 |
| taaatattcc | caaagtggta | aaatatattca | tcattaatag | gtgattgcat | gtctgaaatg | 480 |
| aaaaatgttg | ttacttctga | atagcctgag | aaaaagaaca | tgccaacaat | ttagaaatta | 540 |
| aaccctacac | aagtgttgac | agccatagta | agaaaagagt | gcatacaaca | aatgttaaga | 600 |
| gctattttaca | gattttaaaag | cagttcccat | tcttgacagca | aaattgggtga | cataaaacca | 660 |
| tttgtaacctg | ccccgggcgg | ccgctcgaaa | ggcgcaattc | cagcacactg | gccgnccgtt | 720 |
| acttagtgga | tccgagctcg | gtccaagcct | tgcgtaaatc | atggnccata | ntgggttctg | 780 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| nggtgaaatt | ggtatcccg | tcacaatttc | nccccancat | acgaanccgg | aagccntnaa | 840 |
| gngtaaaanc | cctgggtggc | ctaagtgtg | aactaactca | cattttaaag | cgtgcgctta | 900 |
| ctggcccggt | ttccaatcng | ggaaaactgt | cgngcccact | ggntttaang | aatcggccan | 960 |
| gccccnngg | gaaaaaang | ggtgcnnatt | gggccctttt | tcggttcctt | ggttantgga | 1020 |
| atcn | | | | | | 1024 |

<210> 63

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 63

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|------|
| gagnnnnnt | taacnccgc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gcccttagcg | tggtcgcggc | cgaggtagat | tgacttcatt | actaaagaac | 120 |
| aaaaatgttc | atttttgtcc | cagtaaatgt | agactgcttg | tacttttttt | tttttttttt | 180 |
| tttttttttt | ttattaaaat | actgagtttt | atttcacatg | tatatttttg | tctccccacc | 240 |
| atttccatgt | ctgaccaccg | ctactactat | gtcctatcat | aacattccat | acatacttaa | 300 |
| aaccaagcaa | agggtggagt | tccatcttta | aaaactaaac | ggcatttttg | acaacacatt | 360 |
| cttggaata | naacctggac | aacattttat | aaacacggta | gggaaagttc | tcactctgca | 420 |
| ttataaaaa | gacagccaga | tatcaactgt | tacagaaatg | aaataagacg | gaaaattttt | 480 |
| taacaaattg | tttaaaactat | tttcttaaag | agacttcctc | cattgccaga | natcttgaat | 540 |
| agcctcttgg | tcagtcaccc | ggaagcaatt | cttcacataa | ttgatgaatt | tggtctccac | 600 |
| tttgggaaga | gaaccacctt | tttctatact | tgcttgcat | tttgcttaa | tgncctctac | 660 |
| agaactaggt | ccttttggng | ttttaggagt | tttttctgn | ttcttgaagg | attcttggcc | 720 |
| ttttgancct | ggggtgaaa | ganggnittg | agtcttttca | ttctgaattg | acttttgggc | 780 |
| atttttggct | ggagnatctc | ggatagattt | cttcactggg | gctttttctt | nagntttcct | 840 |
| catatcaaaa | tcntcatcat | catcancctt | atnaanatcc | cctttaatna | anatcggnat | 900 |
| tnatntttat | tnagcngcaa | ggtttacttt | ttttctgggg | gaanccttgt | tanccctttt | 960 |
| cagggggcaa | aaccgggttt | ccaaaaatnc | ccttaanaat | ttncaaaanc | cncncncntt | 1020 |
| ttaa | | | | | | 1024 |

<210> 64

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 64

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggagnnnnnn | ttngtttcc | gaattggggc | ctctagatgc | atgctcgagc | ggccgccagt | 60 |
| gtgatggata | tctgcagaat | tcgcccttag | cggccgccc | ggcaggtaca | gccaacggtt | 120 |
| tcccttgggg | gctttgaaat | aacaccacca | gtggtcttaa | ggttgaaagt | tggttcaggg | 180 |
| ccagtgcata | ttagtggaca | gcacttagta | gctgtggagg | aagatgcaga | gtcagaagat | 240 |
| gaagaggagg | aggatgtgaa | actcttaagt | atatctggaa | agcggctctg | ccctggagg | 300 |
| ggtagcaagg | ttccacagaa | aaaagtaaaa | cttgctgctg | atgaagatga | tgacgatgat | 360 |
| gatgaagagg | atgatgatga | agatgatgat | gatgatgatt | ttgatgatga | ggaagctgaa | 420 |
| gaaaaagcgc | cagtgaagaa | atctatacga | gatactccag | ccaaaaatgc | acaaaagtc | 480 |
| aatcagaatg | gaaaagactc | aaaaccatca | tcaacaccaa | gatcaaaaag | acaagaatcc | 540 |
| ttcaagaaac | aggaaaaaac | tcctaaaaaa | ccaaaaggac | ctagtctctg | agaagacatt | 600 |
| aaagcaaaaa | tgcaagcaag | tatagaaaaa | ggtgggttct | ttcccaaatg | ggaagccaaa | 660 |
| ttcatcaatt | atgtgaagaa | ttgcttccgg | atgactgacc | aagaggctat | tcaagatctc | 720 |
| tggcaatggg | agaagtctct | ttaagaaaaa | agtttaaaac | atttggtaaa | aaatttttcc | 780 |
| tcttatttca | tttctgtacc | agttgatatc | ctgctgtcct | ttttataatg | cnaagtggag | 840 |
| aactttccct | accggttttg | ataaatgttg | gncaggttct | attgcccagg | aatgtgtgnc | 900 |

```

ccaaaaatgcc cgntagtttt tnaagatgga acttcacccn tttgcttggn ttttaagtatg      960
nntngaangt ntgatnggac cntatnntna ccgnggncaa ccttggnaaa tgggtggggag      1020
acaa                                           1024

```

```

<210> 65
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 65
gggnnnnnnt aactnnacgc ccgcttggtg ccgagctcgg atccctagta acggccgcca      60
gtgtgctgga attcgccctt agcgtgggtcg cggccgagggt actctgctga tctctgcctt      120
gtaatggaaa tggttcattc attaatgtta ttgatatggt tgcactatgt ccgtaatttt      180
gctttttgtg tatctgtcta atgtttttta tctctctttt tctcttttac tattttcttt      240
taaatataagt aaatagttcc taacgtagta ttttattttc ttaaaataaa tcaaactcac      300
ttataaaata tatttcata tactttctta tcyattgctg tatgccttac aacatacatc      360
ttatcagact caacatttat agtaacataa atccattgag acatagtaac attaatcttt      420
tataggctcta tttattctac ttattcaata attgttatat atatattaca tctacatggt      480
acaaacacaa aaatatattg ttataatgct tgtttttatg taattttatg tcttttaaag      540
aacatgagag aagaaaaggaa agcaaagtaa ctattagcat tgttatgtta acattattct      600
ttacaatttc tgggtctctt catttttttc ctggtgattc aagttgtatc ttagtgcatc      660
ttcatttctt taatacaact ttgctccaat tatttctttt gtgctcttaa tgtcaaatat      720
attaagtttt gnttgcatta taggctcaac actattatac atatattggt ttatgcattt      780
attttgaatt aagagaaaat aaaaatatgc aatttaattg cttatatact attcatataa      840
ttaccctcta tgagggttnc ttatatatgn attccaaccn tatttataaa ntccaaanta      900
cctggtangt gccnaaaggc tcctaagcct attagcccgg aaaaaaaatc cctgggtant      960
tccttggnaa gggagggttg attgccacca acctntttta natnggggtg ggttttaata      1020
aacc                                           1024

```

```

<210> 66
<211> 1024
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 66
ggagnnnnnn ttngttnngg gccctctaga tgcattgctc agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct ttcgagcggc cgcccgggca ggtactccag cctgggtaac      120
agaggagagac tctatgccaa acaaaacaac aaacaaacaa acaacaatg gagaccagaa      180
agcaatgaga tgaaatgttc aaagtgtctg aagaaaaaaa aagggtcaacc aaaagtctta      240
tatccagaat atttttcaaa gtataaaaagc aaaatacatt ctcagataat aaaaacaaaa      300
caaactaaaa gagtttggtg ctatcatacc taccttaca gaaataactca gtgatttttt      360
tcaggctaatt aggctaggag catttggcac ctaacagtaa tttgaattta tatatatgtt      420
tgtatacata tatattggaac actcatagag gtaattatat gaatagttat ataagacatt      480
aaattgcata tttttatttt ctcttaattc aaaaataaatg cataaaacaa tatatgtata      540
atagtgttga gcctataatg caaacaaaac taatatattt gacattaaga gcacaaaaga      600
aataattgga gcaaagtgtt attaaagaaa tgaaatgaca ctaagatata acttgaatca      660
acaggaaaaa aatgaagaga accagaaatt gtaagagaata atgntaacat aacaatgcta      720
atagttactt tgctttcctt tcttctctca tgnctcttaa aagacataaa attacataaa      780
aaccaagcat tataacaata taattttggg tttggaacat ggtagatgta tatatatata      840
ccattatttg ataagtagaa taaataggaa tattaaggaa ataatggtac tatggctcaa      900
tgggantaag gtacctataa nggtgagcct gganaggaag natgttgnaa ggcttccggc      960
aatcggttta gaaagtantt tggaaatata ttttnatnaa gnggggttga ttaatttagg      1020

```

aaaa

1024

<210> 67
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 67

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|------|
| gagnnnnnnnt | taactccagc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gccctttcga | gcggccgccc | gggcagggtac | tttttttttt | tttttttttt | 120 |
| ttttggaaaa | tgagattttt | gactttaaca | aaacaaatac | agattgaatt | taccaaatat | 180 |
| tgataattca | tgtanaacgg | gtgccacaga | ttttaagta | tcaaaaccaa | gagggcatca | 240 |
| caaaataaac | tttggtgaaa | aatatcttca | tcaaaagaaga | aaatatgaga | agagtagtcc | 300 |
| ttatgcagtg | aggagaaata | tatttggtaa | agtaaataatg | ggtagtagat | actgaatcta | 360 |
| tagatagcat | atattccaaa | tgttttttag | ggaatdtcaa | atcagatgat | gcttanatgt | 420 |
| tatagtaata | tcacttatct | catttggaat | gaaatttaat | gttttttaat | aaatagcaaa | 480 |
| ttttcatttt | ttcactacct | ttataaaaaca | aattaaatat | ttagagtata | actgatacata | 540 |
| actaacatca | ccttgcattt | actaataaat | actctaaata | catttggttt | attattggaa | 600 |
| tttatatcct | tataatttta | cctgctagaa | attagtgacc | ttgtggcatt | atgtttaaag | 660 |
| tttacatttt | cccagtgatg | tgaacagtat | ttatacntaa | aatggatgc | tgnccaatga | 720 |
| atagtaacca | tgtttggtgg | tttaaaaacc | gnacatgggt | tagtttgaca | ttggcatgtc | 780 |
| tcttcagaaa | ttnaaaaggt | atcntttaag | ggatggcttt | tnggaaatca | ttaataaaact | 840 |
| accntctggg | aaaangaatn | ccaatttcaa | gaagctacct | aantagaact | cagaccccn | 900 |
| gggcagggtg | ttggnanaaa | angctttcaa | ttncaaattn | ntnttccggn | gnaaacggaa | 960 |
| ngggaccctt | annngnntgg | accncctttc | cngnaaactg | gtttttaaata | aaaaatttcc | 1020 |
| gnnc | | | | | | 1024 |

<210> 68
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 68

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| gnnngnnnnnn | ntnnnttcga | attgggccct | ctagatgcat | gctcgagcgg | ccgccagtgt | 60 |
| gatggatata | tgagaattc | gcccttagcg | tggtcgcggc | cgaggtaacct | agtagatcta | 120 |
| ctgagattaa | acgggacctg | tttgagcag | aaccttttga | cccatttaac | tgtggagcag | 180 |
| cagattttccc | tccagatatt | caatcaaaat | tagatgagat | acaggagggg | ttcaaaatgg | 240 |
| gactaactct | tgaaggcaca | gtattttgtc | tcgaccggt | agacagtagg | tgctgacatc | 300 |
| aagaacaaga | aatcctgatt | catgttaaata | gtgtttgtat | acacatgtca | tttattatta | 360 |
| ttacttttaag | ataggatatta | ttcatgtgtc | aatgttttta | aatatttttaa | tattttgaaa | 420 |
| attttctcag | ttaaatttcc | tcaccttcac | tattgatctg | taatttttat | tttaaaaaca | 480 |
| gcttactgta | aagtagatca | tacttttatg | ttcctttctg | tttctactgt | agatgaattt | 540 |
| gtaattgaaa | gacatattat | acaaataacct | gccttggtgc | tgagttctat | ttagtttagca | 600 |
| tcttgaaatt | tgtattcatt | ttccagatgg | ctagtttatt | aatgatttcc | caaaagccat | 660 |
| accttaaaaga | taacttttta | aattctgaag | agacatgcca | atggcaaaact | aaacatgggc | 720 |
| tggtttttaaa | ccaaccaaca | tggtactatt | cattgggaca | gatatcattt | tatggataaaa | 780 |
| tctgggtcaca | tactggggaa | atggaaactt | taaacataat | ggccccangg | cactaatttc | 840 |
| ttaccggtaa | aaatnttang | ggtttaaant | nccatattna | acccnatggg | tttaaaggat | 900 |
| ttattntaaa | ngcnnngggg | ngtanntttg | acagntnncn | ctaaaanttt | aaatgggttn | 960 |
| ttaaagggtnt | gaaaaaanga | aaaattgctt | ttttttnaaa | acctttaant | cntttccnag | 1020 |
| gggn | | | | | | 1024 |

<210> 69
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 69
gggnnnnnnn tnncttanac gccnngcttg gtaccgagct cggatcccta gtaacggccg 60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg cagggtactcc ggtcgggtgct 120
agcagcacgt ggcattgaac attgcaatgt ggagcccaaa ccacagaaaa tggggtgaaa 180
ttggccaact ttctattaac ttatgttggc aattttgcc acaacagtaa gctggccctt 240
ctaataaaaag aaaaattgaaa ggtttctcac taaacggaat taagttagtg agtcaagaga 300
ctcccaggcc tcagcgtacc tcggccgcga ccacgctaag ggcgaattct gcagatatcc 360
atcacactgg cggccgctcg agcatgcatc tagagggccc aa!tcgccct atagttagtc 420
gtattacaat tcaactggccg tcgttttaca acgtcgtgac tgggaaaacc ctggcggttac 480
ccaacttaat cgccttgag cacaatcccc ttctcgccagc tggcgtaata gcgaagaggc 540
ccgcaccgat cgccttccc aacagttgcg cagcctgaat ggcgaatgga cgcgccctgt 600
agcggcgcat taagcgcggc ggggtgtgtg gttacgcgca gcngtgaccg ctacacttgc 660
cagccgcccta cgccgctcct ttccgtttct tcccttcctt tctcgccacg ttcgcccggc 720
ttccccgtca agctctaaat cgggggctcc cttttagggg tccgaattan tgctttacgg 780
accttgaccc caaaaaactt gantanggtg atgggtcacg taatggggcc atnggccttg 840
anaagacggg ttttcgccct ttgacngttg gagtccacgt tctttaaaag gggactcttg 900
gttccaaact ggaacaaccn nttaancctt atttngggct aatccttttg aattaatnag 960
ggattttgcc caatttgggc ccttnggtta aaaaaagggg cttgntttaa ccaaaaattt 1020
aacc 1024

<210> 70
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 70
ggagnnnnnn ttnggttttg gccctctaga tgcattgctc agcggccgccc agtgtgatgg 60
atatctgcag aattcgccct tagcgttggtc gcggccgagg tacgctgagg cctgggagtc 120
tcttgactcc actacttaat tccgtttagt gagaaacctt tcaattttct tttattagaa 180
gggccaagctt actgttggtg gcaaaaattg caacataagt taatagaaag ttggccaatt 240
tcacccatt ttctgtggtt tgggctccac attgcaatgt tcaatgccac gtgctgctga 300
caccgaccgg agtacctgcc cgggcggccg ctcgaaaggg cgaattccag cacactggcg 360
gccgttacta gtggatccga gctcgttacc aagcttggcg taatcatggt catagctgtt 420
tcctgtgtga aattgttatc cgctcacaat tccacacaac atacgagccg gaagcataaa 480
gtgtaaaagc tgggggtgctt aatgagttag ctaactcaca ttaattgcgt tgcgtcact 540
gcccgttttc cagtcgggaa acctgtcgtg ccagctgcat taatgaatcg gccaacgcgc 600
ggggagaggc ggtttgcgta ttgggcgctc ttccgcttcc tcgctcactg actcgtgctg 660
ctcggctcgtt cggctgcggc gagcggatc aagctcactc aaaggcggtg atacngttat 720
ccacagaatc aaggggatac gcaggaaaaga acatgtgaac caaaaggcca caaaaggcca 780
ggaaccgta aaaaaggccg cgttggcttg cgttttttcc atangcttcc ggcccccttg 840
acgaacatta ccaaaaatcg acgctcaagt tcaaaaggtg cgaaanccc accggactnt 900
taagaatccc agcgttttnc cctgggaactt ccttgggcgc ttttctggtt ccaaccttgc 960
cgttaccgga tacctggncc gentttttcc ctttngggaa accnnggcnt tntcaaaant 1020
taac 1024

<210> 71
<211> 1024

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 71
gagnnnnnt taactccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggctcgcggc cgaggtactt ttttttttcc tttttttaca 120
tctgatttta atgcttcgtt aacttcaaaa ggaaactggta gagttcagaa ggtgagctgt 180
tgtttttcta aacctcttcc caggaagggg acattgacac ttgaattttt gtcacctttt 240
tcctcattag aaggaaagta gaaagcctta ctgtaggatt tttaaaaaaa aatccatctc 300
accccatatt ggtcttaaat aagtatagac taattaacct aagctacctt taacaacgta 360
gaatttagat gggttcatat atgtgagaaa aacctgaata taggacaggg gtccactttt 420
tttccccacc tctgtcggcc aggctagagt atagtgggtg gatcttggcc cactgcaacc 480
tctgtctcct aggttcaagt gattctcctg cctcagcctc ccaagtagct gggattgtaa 540
gagtatgccca ccacgcccag ctactttttg tatttttagt agagacaggg ttcatcatg 600
ttggccagga tggctctcta actcctgccc tcaagtgatc caccagagag gagatcctcg 660
gcctcccaa gtgctgggat tataggcatg agccaccgtg cccagcctac tttctaatta 720
attaaaaaaa aaaaaaaac ttcccaaatg agctgataaa aaactgacgt gaggtcgtt 780
tgcttcaat aatacctagt tttcagctgt tccaactcgt ttccaaattg gaaattanct 840
ggaacnccac tacagtaatc ttcanggaan gggaaaatta ggcttataaa gaatccccag 900
aaagttcanc atnggnancc tgnccnggcc ggnccgttca aaangggcna aatttgacaga 960
aattccatna cacttggcgg gccgttcgan catggctttt aangggccca attgncctt 1020
aaag 1024

<210> 72
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 72
gnagnnnnn ttnnttccg aattgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta ccatgctgac 120
ttcttggtat cttttaaggc ctaattttcc ctcccttgag attactgtag tgtgttccag 180
ctaatttcta tttgaaaacg agttggaaca gctgaaaact aggtattatt gaaggcaaa 240
cagcctcacg tcagtttttt atcagctcat ttgggaagtt tttttttttt ttttaattaa 300
ttagaaaagta ggctgggcac ggtggctcat gcctataatc ccagcacttg gggaggccga 360
ggatctctc tctggtggat cacttgaggg caggagttaa gagaccatcc tggccaacat 420
gatgaaaccc tgtctctact aaaaatacaa aaagttagctg ggcgtggtgg catactctta 480
caatcccagc tacttgggag gctgaggcag gagaatcact tgaacctagg aagcagaggt 540
tgcaaggggc caagatcaca ccactatact ctgacctggg cgacagaggt ggggaaaaaa 600
gtaggacccc tgtcctatat tcagggtttt ctacacatata tgaaccatc taaattctac 660
gttgtaaaag gtagcttagg ttaattaagt ctatacttat ttaagaccaa tatggggtga 720
naatggattt ttttttaaaa atcctacagt aaggtttct actttccttc taatgaggaa 780
aaaggtgacc aaantcaag tggcaatggc ccctttctgg ggaaaagttt anaaaaacca 840
ccggttanct tntggaactt ttaccaggt cccttttgaa gttaccgaag cctttaaaan 900
cagatgttaa aaaaggaan nnnaaaaagt ncctttggcc gggaaccnc ttaagggcca 960
aattccacac acttgggggg ccgntnccnt anggatccca ncttgggncc aaannttggg 1020
gnaa 1024

<210> 73
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 73
gagnnnnnt tnaacttacac gccngcttgg taccgagctc ggatccctag taacggccgc 60
cagtgtgctg gaattcgccc ttagcgtggg cgcggccgag gtactgtgtt atggcacaga 120
caatgcttgc ttagcgggtgc cttgttacat aggtggatgc agagtgcgca cacgggatga 180
tggcaataaa gacctcactc agtcgttggg atgaaggaaac taggtaactg cttcaacaag 240
gacgggtctca gctctacctt atctctcaac agagtgc aaa cactgagtgt gagctcagat 300
gtcatcttgt tcctctttaa aattcaccaa attcttttgc acatttttct gttatagaga 360
cacggatata ttcttcttca tagtcatcaa agttgctggg atctccagag cctctaaact 420
ttggtatgaa tggagcttca accttcctct ggtaaatagc aatccaatct gtcgtggcaa 480
accacttgtg agtttttata tcactgacac cattcttttag atttccaaat ctcttgatca 540
aatccacctg cagcagggttc cgtagaagggt ccttgagatc tgaactgaag tggatggga 600
atcggacctt tccagaaaaca atcttttcat aaatctgaat tgggttggtc gcaagaatg 660
ggggatagcc agctgccatt tcatagatta gcactcctaa tgcccaccaa tccactgcct 720
tattgnagcc cttgctgaga attatttctg gagccaaata cctctggagt tccacataat 780
ggccaagttc tgcctttaac tcttttggca aaccccaaaa gtctgtgacc cgggatatag 840
ccctgatggg ccaattttaag aagaattttc angggtttaa aaactctggg aaatgaaggc 900
taanggaaat ggaggnacct tttttttttt nnnnnnnntt ttttttttaa acnttgtaaa 960
aggccaaaat tttggctana anttantttc aaagnttnaa accntttcca aatttttttt 1020
taat 1024

<210> 74
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 74
ggagnnnnnn nttgagtcc ggccctctag atgcatgctc gagcggccgc cagtgtgatg 60
gatatactgca gaattcgccc tttcgagcgg cgcgccgggc aggtacagtc aactgcattt 120
ttctctgggt accaagcttc cactgacaag gaagaggatt atattcgtaa tgccatggg 180
ctgatatactg actacatccc taaagaatta agtgatgact tatctaaata cttaaagcct 240
ccagaacctt cagcctcatt gccaaatcct ccatcaaaga aaataaaagt atcagatgag 300
cctgtagaag caaaagaaga ttactactaag ttttaatacta aagatttgaa gactgaaaag 360
aaaaatagca aaatgactgc agctcagaag gctttggcta aagttgacaa gagtgggatg 420
aaaagtattg ataccttttt tggggtaaaa aataaaaaaa aaattggaaa ggtttgaaac 480
tttgaaaata aaatctagca aaaatatttg ctttttacct gtttttaaaa aaaaaaaa 540
aaaaaaaaaa aagtacctcc attcactaga cctcatctac agagatctaa aacctgaaaa 600
tctcttaatt gaccatcaag gctatatcca ggtcacagac tttgggtttg ccaaaagagt 660
taaaggcaga acttgacat tatgtggaac tccagagtat ttggctccag aaataattct 720
cagcaagggc tacaataagg cagtgggatt ggtgggcatt aggagtgcata atctatgaaa 780
tggcactggc tatccccatt cnttgcagac ccacccattc agaatttatt gaaaaagatg 840
gttcttgtaa ngncgaatt cccattcccc ttcagntcna actcaagggc ctttttacgg 900
aanccgtggt gcanggggga ttgatccagg anaatttgga aatcttaaaag aaaaggggnc 960
cggggtttta aaaacctcnc aagnggggtt gccccancg naatgggatt ggtttttccc 1020
ccna 1024

<210> 75
<211> 1024
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 75

| | | | | | | |
|-------------|------------|------------|-------------|------------|-------------|------|
| gagnnnnnnnt | taactccccg | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gcccttagcg | tggtcgcggc | cgaggtacta | tatgtatttt | attaaaaatg | 120 |
| tggaagatta | atctgtttct | ctctgaatgt | agattttcac | caaaacatct | cttaaaacag | 180 |
| cagggactca | acacttaaaa | atgaactaga | agagctgggc | acagtggctc | acgcctgtaa | 240 |
| tcccagcact | ttgggaggcc | gaggcgggca | aatcacttga | ggtcaggagt | tcgagaccag | 300 |
| cctggccaac | atggtgaaac | cctgtctcta | ctaaaaacac | aaaaattaac | tgggcatggc | 360 |
| ggcacacgcc | tttaatccca | gctactcaag | aggctgaggg | aggagaatcg | ctttgaacct | 420 |
| gggaggcaga | ggttgcagt | tgctgagatc | ataccactgc | attccagcct | gggcgacaga | 480 |
| gcaagactcc | acctcaaaaa | aaaaaagaag | aaaagaaaat | agtagtctca | gccaggcgtg | 540 |
| atgggtcaca | cctgtaatcc | cagcactttg | ggaggccaag | gtgggcagat | cacctgaggt | 600 |
| caggagtctg | agaccagcct | ggcctacgtg | gcaaaacctc | atctctaata | aaaatacaaa | 660 |
| aattagcttg | ggcgtggtgg | catgcacctg | tcataccagc | tatttgggag | gctgagacag | 720 |
| gagaagtcgc | tttgaacctg | ggangcagaa | aattgcgggtg | aagctaagat | cgcacgactt | 780 |
| cacttccacc | tgggcaaaa | anggaactct | atctcaaaaa | aaaaaaangg | aaaaagttagt | 840 |
| ctntaagaca | ctgggcaaac | cttgaagga | attgagcagt | cctcactttt | ctgnagtcan | 900 |
| tttgntaat | gccacatggc | tcttttgnaa | gaaatttgag | agcttttttc | taatcccaat | 960 |
| ttttntaatt | tgggaattcc | tttttccgga | ttttttcntt | gccngngngt | gttcccaang | 1020 |
| gcct | | | | | | 1024 |

<210> 76
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 76

| | | | | | | |
|------------|-------------|------------|-------------|-------------|------------|------|
| gnngnnnnnn | ttnnnttgng | antngggccc | tctagatgca | tgctcgagcg | gccgccagt | 60 |
| tgatggatat | ctgcagaatt | cgccctttcg | agcggccgcc | cgggcaggta | ctctttgtgg | 120 |
| ctggcttctt | tttctgcaca | caatgcctat | gagaccataa | ctaaagtcaa | attccatggg | 180 |
| cactaaccac | taatggcatc | tcaaaagaa | tccaacctag | agaaattctg | atgatgtggg | 240 |
| tagaacacca | atcaggacac | tactttcatg | gttgataatt | cccgcacatg | actgattcag | 300 |
| accagctta | ttgaattcat | tgagtccaca | ggccagcact | ttgcctgact | gggtcaacag | 360 |
| aaatgtccca | tcacagccac | attgaactgc | aacaataatc | aaggccttgg | gaacatccac | 420 |
| ctgcaagaaa | aaaatcagaa | aaagaaatcc | caaataatata | attcgtatta | gaaaaaaagc | 480 |
| tctcaaattc | tttcaaaaga | gacatgctgc | atttagcaga | atgactacag | gaaagtgagg | 540 |
| actgctctat | tcttttcagg | tttgcccagt | gtcttagaga | ctactttttc | tttttttttt | 600 |
| tttgagatag | agtttccctc | ttttgcccag | gctggagtga | agtcctgtcg | atcttagctc | 660 |
| accgcaatct | ctgcctccca | ggttcaagcg | acttctcctg | tctcagcctc | ccaaatagct | 720 |
| gggatgacag | gtgcattgcca | ccacgcccag | ctaatttttg | gattttttatt | agagnatgag | 780 |
| gttttgccac | gtaggccaag | ctggncttga | acttctgacc | ctcaagtga | tggccaccct | 840 |
| tgggccttcc | aaagtgtctg | gaattacagg | gngagccatt | acgcctggnn | tgaactcca | 900 |
| atttcttttc | ttcttttttt | ttttggnggg | gagcttgctn | tgcncccaag | ctgggaaagc | 960 |
| cangggatga | cttnnnnncac | tggaaccttg | gcttcagggt | taaagggatt | tctggcttaa | 1020 |
| nccc | | | | | | 1024 |

<210> 77
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)

<223> n = A,T,C or G

<400> 77

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|------|
| gagnnnnnt | aacttacacg | cccgcttggt | accgagctcg | gatccactag | taacggccgc | 60 |
| cagtgtgctg | gaattcgccc | ttagcggtgt | cgcgcccgag | gtactttttt | tttttttttt | 120 |
| ttttttttac | agaaggctgt | aaagctttat | tgggagaatt | ttaatgaaca | aattttccaa | 180 |
| ataggagcag | cctgcatcat | ttcaacgtgc | cttcttttaa | cactgtgatt | gcttttcacc | 240 |
| ttcttcaggc | gttttcacct | cctctggatt | tggcgggtcc | atctcctgcc | catcaggacc | 300 |
| atcttcacac | tcacacccag | tctgtgggtg | accctgttcc | tggctatgag | cttcaggctt | 360 |
| cggcccttga | cctgcanatg | ctccctcatc | ctctccctcc | tgagcagctg | caggatcctg | 420 |
| acgttgagtt | gctgggtccc | cttcttcagg | tgttgctggt | tccgcttcat | caactgaactg | 480 |
| ctcgggcgcg | ataggcccaa | tcatttcagg | aggctgnacc | tgcccgggcg | gccgntcgaa | 540 |
| agggcgcaatt | ctgcagatat | ccatcacact | ggcggccgnt | cgagcatgca | tctagagggc | 600 |
| ccaattcgcc | ctatagttag | tcgtattaca | attcactggc | cgtcgtttta | caacgtcgtg | 660 |
| actgggaaaa | ccctggcggt | acccaactta | atcgcccttg | agcacatccc | cctttcgcca | 720 |
| gctggcgtaa | taacgaaaag | ccccgcaccg | atcgcccttt | ccaacagttg | cgcancctga | 780 |
| aagggcnaaa | tggacncccc | tggaacggcc | attaaccccc | gcnggnnnnn | gggtaccccn | 840 |
| caangngacc | ggtacacttg | gcaangccct | aacgcccggg | ccntttgntt | ttctttcctt | 900 |
| tcnttttngc | acgttnnncc | gggttttccc | ggnaagctnt | naaatngggg | ggtcccnntt | 960 |
| tnnggtccna | ataaggcntt | tagggncctt | ggncccnnaa | aaatttgntt | ttnnngggan | 1020 |
| ggtc | | | | | | 1024 |

<210> 78

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 78

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|------|
| gnagnnnnnn | ttgagtttgg | gccctctaga | tgcattgctg | agcggccgcc | agtgtgatgg | 60 |
| atatctgcag | aattcgccct | ttcgagcggc | cgcccgggca | ggtagagcct | cctgaaatga | 120 |
| ttgggcctat | gcgcccgag | cagttcagtg | atgaagcgga | accagcaaca | cctgaagaag | 180 |
| gggaaccagt | aactcaacgt | caggatcctg | cagctgctca | ggaggagag | gatgagggag | 240 |
| catctgcagg | tcaaggggcg | aagcctgaag | ctcatagcca | ggaacagggt | caccacaga | 300 |
| ctgggtgtga | gtgtgaagat | ggcctgatg | ggcaggagat | ggacccgcca | aatccagagg | 360 |
| aggtgaaaac | gcctgaagaa | ggtgaaaagc | aatcacagtg | ttaaaagaag | gcacgttgaa | 420 |
| atgatgcagg | ctgctcctat | gttgaaaatt | tgttcattaa | aattctccca | ataaagcttt | 480 |
| acagccttct | gtaaaaaaaa | aaaaaaaaaa | aaaaaaagta | ctcgcccgcg | accacgctaa | 540 |
| gggcgaattc | cagcacactg | gcggccggtt | ctagtggatc | cgagctcggt | accaagcttg | 600 |
| gcgtaatcat | ggtcatactg | gtttcctgtg | tgaattgtt | atccgctcac | aattccacac | 660 |
| aacatacgag | cccgggaagca | taaagtgtaa | agcctggggg | gcctaattag | tgagctaact | 720 |
| cacattaatt | gcgttgccgc | tactgccccg | ctttncagtc | gggaaacctg | tcgtgccagc | 780 |
| tgcattaatg | aatcggncaa | cgccccgggg | aaaaagcggt | ttgcgtattg | ggcgctcttc | 840 |
| gctttcttgg | ttacttgact | cnttngcct | tggccgttcg | gttgcggnna | acggtttcag | 900 |
| cttacttcaa | angcgggaaa | tccggttttc | cncggaaatc | aggggaatac | ccnnggaaaa | 960 |
| gaacttgtga | accnaaaggc | ccnccaaaag | gcccngnaac | cgtaaaaaan | ggcccnntnn | 1020 |
| nntn | | | | | | 1024 |

<210> 79

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 79
gngnnnnnnnt taacnccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtg 60
gctggaattc gccctttcga gcggccgccc gggcaggtag tgtttttgct atttgcacca 120
gcttctttct ccaggaaaga tcaaaacgat gcactgcaag gttaacatcc aattttta 180
acattgtgat tggccagat agctgcctta tccaaactgcc tcctttggac cacttcatca 240
tgggacagct tgatgcaatc tacttgacaa gacctggaa cccacacccc ctcatggaac 300
cagtgtccac ctcccagtc cagtgtgacc ccagggaact cttgcctgct tgctttaaac 360
ccaccactta aaagtctcca cagaaaacct gtttgaatag tacctcggcc gcgaccacgc 420
taaggggcga ttctgcagat atccatcaca ctggcgccg ctcgagcatg catctagagg 480
gccaattcg ccctatagt agtcgtatta caattcactg gccgtcgttt tacaacgtcg 540
tgactgggaa aacctggcg ttaccaact taatcgctt gcagcacatc cccctttcgc 600
cagctggcgt aataagcga gagggccgca ccgatcgccc ttcccaacag ttgcgcagcc 660
tgaatggcg aaatggacgc gccctgtagc ggcgcattaa gcgcggcggt gtggtggtgg 720
ttacgcccga gcgtgaccgc tacacttgcc agcgcctta cgcgcgtcc tttcgctttc 780
ttcccttct tttngcacg ttcggccggc ttttcccgct agctctaaat cgggggctcc 840
cctttagggt tccgaattan tgccttacgg gacctganc cccaaaaact tggnttaggg 900
gtgaggggtc cgtatggggc attggccctg aaaanacgg ttttcgccc tttgaccctt 960
ggaatcncgt nnttttaaaa ggggactttg gtcccaactg ggacaacnnt taaccctta 1020
ttng 1024

<210> 80
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 80
gnagnnnnnn tnnnttgng aattggggcc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtgggtcgcg ccgaggtact attcaaacag 120
gttttctgtg gagactttta agtgggtgggt ttaaagcaag caggcaagag ttccctgggg 180
tcacactgtg actgggaggt ggacactggt tccatgagg gtgtggggtt ccagggtctt 240
gtcaagtaga ttgcatcaag ctgtcccatg atgaagtgg ccaaaggagg cagttggata 300
aggcagctat ctggaccaat cacaatgtat taaaaattgg atgttaacct tgcagtgcac 360
cgttttgatc tttcctggag aaagaagctg gtgcaaatga caaaaacagt acctgcccgg 420
gcggccgctc gaaaggcgca attccagcac actggcgccc gttactagt gatccgagct 480
cggtagcaag cttggcgtaa tcatggtcat agctgtttcc tgtgtgaaat tgttatccgc 540
tcacaattcc acacaacata cgagccggaa gcataaagt taaagcctgg ggtgccta 600
gagtggagcta actcattta attgctgtgc gtcactgcc cgctttccag tcgggaaacc 660
tgtcgtgcc gctgcattaa tgaatcgcc aacgcgcgg gaaaagcggn ttgcgtattg 720
ggccgctctt ncgcttncn gcttacttga ctgcgttgcg ctgcgnccgt tcggcttgcg 780
gcnaagcggg attcagctta cttcaaaggc ggtaaatcn ggtattcccc agaaatcagg 840
gggatnacc cnggaaaaga acatgtgaan ccaaaaggcc accaaaaagg ncnnggaacc 900
gtnaaaaang gccnnttnn nctgngttt ttccattaag gttcccgc ccttgacagc 960
ctttccaaaa attcganncc ttcaaantnc aaagggggcn aaaacccnc cggggctttt 1020
taag 1024

<210> 81
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 81
gngnnnnnnnt taacttacac gccagcttgg taccgagctc ggatccctag taacggccgc 60

| | | | | | | |
|------------|------------|-------------|------------|-------------|------------|------|
| cagtgtgctg | gaattcgccc | tttcgagcgg | ccgcccgggc | aggtacctca | ttagtaattg | 120 |
| ttttgttggt | tcattttttt | ctaattgtctc | ccctctacca | gctcacctga | gataacagaa | 180 |
| tgaaaatgga | aggacagcca | gattttctcct | ttgctctctg | ctcattctct | ctgaagtcta | 240 |
| ggttacccat | tttggggacc | cattataggc | aataaacaca | gttcccaaag | catttgga | 300 |
| gtttcttggt | gtgttttaga | atggttttcc | tttttcttag | ccttttcctg | caaaaggctc | 360 |
| actcagtc | ttgcttgctc | agtggactgg | gctccccagg | gcctaggctg | ccttcttttc | 420 |
| catgtccac | ccatgagccc | tccactggac | agctcagtaa | gcctggccct | tcattctgcg | 480 |
| ctgtgttctt | cctctgtgaa | aatccaatac | ctcttacctc | ctctgcatgc | aaagattctc | 540 |
| aaggattgtc | agacttcaaa | cgtaacagca | gaaccaccag | aaggtcctat | aaatgcagta | 600 |
| gtgaccttct | caagctgtca | ggtctttaaa | taggatttgg | gatttaatgc | tatgtatttt | 660 |
| taaaggaaag | aaataagaag | ttgctagtgt | taaaaatgca | tgtcttttaa | ccaattcaga | 720 |
| atctgcccc | aaactttttt | naaaagtcaa | gacagataaa | gctttggggg | agacngaaaa | 780 |
| aaaaaannnn | nnnaaagagt | acctnnggcc | gggaacacgc | taangggcaa | attctggcan | 840 |
| aaatncatta | cactgggcgg | gcggtttgag | cattgcntnt | anangggccc | aattngncct | 900 |
| ataanggggg | cgattacaat | tncctgggcc | gcgttttaaa | acgtnnngaac | tgggaaaanc | 960 |
| ctggggtncc | cacnttaatg | gccttgngna | naatccccct | tttncccnan | tggngnannn | 1020 |
| nnnn | | | | | | 1024 |

<210> 82
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|------|
| gnagnnnnnn | ttngtgg | gccctctaga | tgcattgctg | agcgcccgcc | agtgtgatgg | 60 |
| atatctgcag | aattcgccct | tagcgtgggc | gcggccgagg | tactcttttt | tttttttttt | 120 |
| ttttccgtct | ccccaaagct | ttatctgtct | tgacttttta | aaaaagtttg | ggggcagatt | 180 |
| ctgaattggc | taaaagacat | gcatttttaa | aactagcaac | tcttatttct | ttcctttaaa | 240 |
| aatacatagc | attaaatccc | aaatcctatt | taaagacctg | acagcttgag | aaggctacta | 300 |
| ctgcatttat | aggaccttct | ggtggttctg | ctgttacgtt | tgaagtctga | caatccttga | 360 |
| gaatctttgc | atgcagagga | ggtaagaggt | attggatttt | cacagaggaa | gaacacagcg | 420 |
| cagaatgaag | ggccaggctt | actgagctgt | ccagtggagg | gctcatgggt | gggacatgga | 480 |
| aaagaaggca | gcctaggccc | tggggagccc | agtccactga | gcaagcaagg | gactgagtga | 540 |
| gccttttgca | ggaaaaggct | aagaaaaagg | aaaaccattc | taaaacacaa | caagaaactg | 600 |
| tccaaatgct | ttgggaactg | tgttatttgc | ctataatggg | tccccaaaat | gggtaacctt | 660 |
| gacttcagag | agaatgagca | gagagcaaag | gagaaatctg | gctgtccttc | cattttcatt | 720 |
| ctgggtatctc | aggtgaactg | gtaaaaggga | gacatttgaa | aaaaatgaaa | cnaccaaaac | 780 |
| cattactaat | gaggtacctg | cccnggcngg | ccgttcnaaa | gggccaattc | cacacactgg | 840 |
| gcggccgtta | cttaatggat | ccnaactcgg | taccaancnt | tgcgtaaatc | atgggcnnt | 900 |
| actgggttnc | ctgggggnaa | atggtatncg | gttaccatt | cccccaann | ttcgancccc | 960 |
| gaanccctta | agggtaaaanc | cctggggggc | ctnaagaggg | gctaacttcc | catttaaatg | 1020 |
| ggtt | | | | | | 1024 |

<210> 83
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| gggnnnnnnt | taanttanc | gccnnncttg | gtaccgagct | cggatcccta | gtaacggccg | 60 |
| ccagtgtgct | ggaattcgcc | ctttcgagcg | gccgcccggg | caggtagact | taaaattggg | 120 |
| gccgagcagg | gatataacct | gcagttaaagt | gaaaagaaaa | tccagcctcc | ccctccaaaa | 180 |

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|------|
| aaaaaaaaa | atttaatttt | taaaaattag | tggtatggca | ataagacact | tcagaggcta | 240 |
| tcttaacct | tgaataccca | tcttctagtt | taaagacaga | gacatcccat | ctggaaaatg | 300 |
| ttaacttggt | ttgtcatctc | gttgccggag | taagtagaca | taagacagag | tttaagaagt | 360 |
| aaaaatatag | aaaaattttg | atggtcacaa | tgagataaat | attagaatat | tactattcca | 420 |
| atgattaaat | gaggatcttg | aaataaatcc | tgaagtcttc | caatttttac | atttattgga | 480 |
| gggggtccctg | agttctgtca | acttttttat | ttaagtctct | tgctcttatt | ttgtgcataa | 540 |
| atgttaaacc | ttccaaaaat | gaaatgttag | ctttctttct | tttacttttt | attaaattta | 600 |
| atagaaaata | tgacctgagt | agttaaaaag | tattttgcat | tatttgcagt | aagatgtctc | 660 |
| tagcactgct | caaagggcaa | attttaaaac | ttcagtcctg | gtgaaagatt | ttgctagttt | 720 |
| tacagaaaga | tttgctatct | taaactcaaa | gctgggtttt | cttttctcaa | tgtaagtgc | 780 |
| tgggatgctg | gcttaagaat | tctttccaag | gncatgtttg | tgaataaaac | cttacatgag | 840 |
| agctttctct | ncatctacnc | ctatatgtgg | cctngagggt | gaccaaattt | antttagntt | 900 |
| ctaagtgtta | nctatcccaa | atgggctatc | caaatttgaa | tgnggccctt | catactgnga | 960 |
| aggaaaaang | tggnccctng | ccgggaacac | ccttangggc | caattttgcg | anttcctac | 1020 |
| aatt | | | | | | 1024 |

<210> 84
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|------|
| <400> 84 | | | | | | |
| gnagnnnnnn | ttgagntngg | ccctctagat | gcatgctcga | gcggccgcca | gtgtgatgga | 60 |
| tatctgcaga | attcgccctt | agcgtggtcg | cggccgaggt | acagcattat | catctcagta | 120 |
| tgtagtggca | cacattcaaa | atcgtataga | ccatatgagg | atagattaca | acttagaaac | 180 |
| taaaaataat | ttgttcaaca | ctccagacaa | catatagtgt | agatgacagg | aaagctctca | 240 |
| tgtaattgttt | atttcacaaa | catgaccttg | gaagaattca | taagacagca | tcccagtcac | 300 |
| ttacatgaga | aaagaaaaac | cagcttgagt | ttaagatagc | aaatctttct | gtaaaaactag | 360 |
| caaatctttc | acccagactg | aagttttaaa | atttgccctt | tgagcagtcg | tagagacatc | 420 |
| ttactgcaaa | taatgcaaaa | tactttttta | ctactcaggt | catattttct | attaaattta | 480 |
| ataaaaaagta | aaagaaagaa | agctaacatt | tcatttttgg | aaggttttaac | atttatgcac | 540 |
| aaaataagag | caagagactt | aaataaaaaa | gttgacagaa | ctcagggacc | cctccaataa | 600 |
| atgtaaaaaat | tggaagactt | cagaatttat | ttcaagatcc | tcatttaatc | attggaatag | 660 |
| taatatctcta | atattttatc | cattgtgacc | atcaaaaattt | ttctatattt | ttacttctta | 720 |
| aactctgnct | tatgnctact | tactccggca | acgagatgac | caccacaagt | taacattttc | 780 |
| cagaanggat | gtctctgnct | ttaaaactaga | aagatgggta | tttcagaggg | taagaatacc | 840 |
| ctctgaagtg | gtcttaatgg | cataccctta | atttttaaaa | antaaaattt | tttttttttt | 900 |
| tgggnggggg | aaggctggat | ttcctttcnc | ttaacctnga | gggtatatcc | cctgnntggg | 960 |
| acccaatttt | aagngnacct | ggcccgggcn | ggccgttcaa | aagggcgaat | ttccgcnctt | 1020 |
| gggc | | | | | | 1024 |

<210> 85
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 85 | | | | | | |
| gnngnnnnnt | taacnccagc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gccctttcga | gcggccgccc | gggcaggtag | gcggggagag | agaagcgagg | 120 |
| ttctcgttct | gagggacagg | cttgagatcg | gctgaagaga | gcggggccag | gctctgtgag | 180 |
| gaggcaagac | acagtgggtc | gcaggatctg | acaagagtcc | aggttctcag | gggacagggg | 240 |
| gagcaagagg | tcaagagctg | tgggacacca | cagagcagca | ctgaaggaga | agacctgcct | 300 |

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|------|
| gtgggtcccc | atcgcccaag | tctgccccac | actccacact | gctaccctga | tcagagtcac | 360 |
| catgcctcga | gctccaaagc | gtcagcgctg | catgcctgaa | gaagatcttc | aatcccaag | 420 |
| tgagacacag | ggcctcgagg | gtgcacaggc | ccccctggct | gtggaggagg | atgcttcac | 480 |
| atccacttcc | accagctcct | cttttccatc | ctcttttccc | tcctcctctt | ttcctcctcc | 540 |
| tcctcctgct | atcctctaata | accaagcacc | ccagaggagg | tttctgctga | tgatgagaca | 600 |
| ccaaatcctc | cccagagtgc | tcagatagcc | tgctcctccc | ctcggctcgt | gcttcccttc | 660 |
| cattagatca | atctgatgag | ggctccagca | gccaaaagga | agagaagtcc | cagcacccta | 720 |
| caggctcctgc | cagacagtga | gtctttaccc | agaagtgaga | tgatgaaaag | gngactggat | 780 |
| tnggtgcagt | ttctgntntt | taagtntcaa | atgaanggaa | ccgatcncaa | anggccgaaa | 840 |
| tncttggaag | agtgnctnta | aaaaattatg | aagaacnntt | tccttggng | gttaangaaa | 900 |
| cccctccaan | gcnnngcnnn | nggnctttgg | gcnttgangn | nnaanggnaa | gggatcccn | 960 |
| ttgggcennt | tcntttggcc | ttggnnncct | ncctngggcc | ctancctnng | aagggaanc | 1020 |
| cnnn | | | | | | 1024 |

<210> 86

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 86

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|------|
| gnagnnnnnn | ttnngtttcn | gaattgggcc | ctctagatgc | atgctcgagc | ggccgccagt | 60 |
| gtgatggata | tctgcagaat | tcgcccttag | cgtggctcgc | gccgaggtag | tccaggtagt | 120 |
| tttccctgcac | ccaatcttgg | gtgagcagct | tcctgggctc | cccataaatg | aggtgctcca | 180 |
| tcccatcata | cagccccatc | atattcagtg | cttcccagat | gacctcctca | ggggtgcagt | 240 |
| agccctctat | gaagattatg | cttaggataa | gtatgagaat | gccagtcttg | ggcatgctct | 300 |
| ggacatcact | cagcatccca | tcataaggtga | ggcccagggg | ggtgacaagg | acaaaggagt | 360 |
| ggccagtggg | atccacttcc | tttacatcaa | tgccaaagac | cagcagcatg | cactcggagg | 420 |
| cttcactaaa | caacaaaggg | aagtgggtctt | cataattttt | tatgacactc | tccagtattt | 480 |
| ctgcctttgt | gatcggctcc | ttcatttgat | acttgaagag | cagaaactgc | accaaatacag | 540 |
| tcaccttttc | atctatctca | cttctgggta | aagactcact | gtctggcagg | acctgtaggg | 600 |
| tgcttggaact | ctctcctttt | tggtctgctg | agccctcatc | agattgatct | aatggaaggg | 660 |
| aagcaacgac | cgagggggag | gagcaggcta | tctgagcact | ctgggggagg | aattgggtgc | 720 |
| tcacatcag | cagaaacctt | ctctgggggtg | cttggtatta | gangatacag | gaggaggagg | 780 |
| angaagaaga | ngaagaagga | aaagaggatg | gaaaagaagg | actgggtgga | aatggatgat | 840 |
| gaagcatnct | ttttcacagc | ccaggggaac | ctgtgcaccc | ttnaagggcc | tggggcttac | 900 |
| ttttgggaat | tgaagaactt | ntttaggcnt | gccannngnt | tacccttttg | ganccttnag | 960 |
| ggcctnaagn | acctttganc | angggnnncn | nnnnnnngga | attgggcneg | gaaatttggtg | 1020 |
| ccna | | | | | | 1024 |

<210> 87

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 87

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| gggnnnnnnt | taactcatat | gccagcttgg | taccgagctc | ggatccctag | taacggccgc | 60 |
| cagtgtgctg | gaattcgccc | ttagcgtggt | cgcggccgag | gtacattgag | accagcaata | 120 |
| gttccagcat | ctttggtagc | ctgacgctga | gagtcattaa | agtaagctgg | cactgtgacc | 180 |
| acagcattgg | taacagtctt | cccaaggtag | gcttctgcaa | tttcttcat | ctttgtcaga | 240 |
| accatagaag | acacctcctc | tgatagaag | cttttgggtc | ctcccttgta | ttctacttgg | 300 |
| accttgggac | tgccagcatc | attcaccacc | ataaagggcc | aatgtttcat | atcagactgg | 360 |
| acaacagcat | catcaaatct | gcgtccaatc | agacgtttgg | catcaaaaac | tgtgtcgggtg | 420 |

```

gggttcattg caacttgatt ctttgcgga tcaccgatca accgttcagt gtccgtaaag      480
gcgacatagc ttggagtggg tcgggttccc tgatcattgg caattatctc gacttttccg      540
tgctggaaaa caccacaca agagtaggtg gtgccaagat caataccaac tgcagggtccc      600
ttggacatgg ttgctgggat gtaggcctgg ctccaataac gaaggaagcc acaaaaaccc      660
aagagctgca ggcgaagtcc aatgagaccc cccgcggacc tgcccgggcg gccgctcgaa      720
agggcgaatt ctgcagatat ccatcacact ggcgcccgnt cgagcatgca tctaganggc      780
ccaattcgcc ctataagnga gtcgnattac aatcacttgg ccgcgtttta caacgtcgtg      840
acttgggaaa accctggggt acccaactta atcgncttgn agcacaatcc ccntttnncc      900
anctggcgga antnaccnaa aaggccccgna ccgaacggcc ntttccaaaa gttgcncaan      960
cctgaaangg caaaaggacc ccccccttta acggggccat taaaccccn ncngggnnnn      1020
nngg                                     1024

```

<210> 88

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 88

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gnnnnnnttn ngattgggcc ctctagatgc atgctcgagc ggccgccagt gtgatggata      60
tctgcagaat tcgcccttcg agcgcccgcc cgggcaggtc cgcggggggg ctcatggac      120
tcgcctgcag ctcttgggtt tttgtggctt ctttcgttat tggagccagg cctacatccc      180
agcaaccatg tccaagggac ctgcagttgg tattgatctt ggcaccacct actcttgtgt      240
gggtgttttc cagcacggaa aagtcgagat aattgccaat gatcagggaa accgaaccac      300
tccaagctat gtcgccttta cggacactga acggttgatc ggtgatgccg caaagaatca      360
agttgcaatg aacccccacc acacagtttt tgatgcaaaa cgtctgattg gacgcagatt      420
tgatgatgct gttgtccagt ctgatatgaa acattggccc tttatggtgg tgaatgatgc      480
tggcaggccc aaggtccaag tagaatacaa gggagagacc aaaagcttct atccagagga      540
ggtgtcttct atggttctga caaagatgaa ggaaattgca gaagcctacc ttgggaagac      600
tgttaccaat gctgtggtca cagtgccagc ttactttaat gactcttcag cgtcaggcta      660
ccaaagatgc tggaaactatt gctggtctca atgtacctcg gcccgngacc acgctaaggg      720
cgaattncag cacactggcc ggccgntact taatggatcc gaactcggta ccaagccttg      780
cgtaatcatg gnccatactg gtttctgngg tgnaattggt attccggtca caattncnca      840
caacattcca anccggaagc cttnagtgtg aagccctggg tgcccttaag agtgagctta      900
ctnncantta aatgcgttgc gcttntttgg ccgttttcca tcgggnaaan ctgcngccaa      960
ctggaatttaa ggaattggnc aannccccgg ggaaaaaagn gtttggtatg gcgcttttnc      1020
gttt                                     1024

```

<210> 89

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 89

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gggnnnnnnt taaactccag cttggtaccg agctcggatc cctagtaacg gccgccagtg      60
tgctggaatt cgcccttgag cggccgcccc ggcaggatca gttcagtaat gttaaagtga      120
ttcacagtgc tgtgcaaaac atttctatct tgcaaaaccg aagttctata tccactaaac      180
aactccgcat tttccctctc cccagccctt gccaaactgcc attctacttt ctgtttctct      240
atatttgact acactagaca cctcatacaa gttaaatcag agagtatttg tttttttgtg      300
actggtttct ttaaaacttag cataacatcc tcaagatcca tcaatagtct atcatgtatc      360
atgtattact tcttttttaa gggtgaacaa tattccactg tgtgtgtgtg tgtgcacgtg      420
tataccacgt tttgttttag cattcgcca tcaatggaac ttgggttgct tcgacccttt      480
ggctactgta ttacgttgtt ctagcattgc tataaagacc tgagggtggg taatttataa      540

```

```

agaaaagaag ttctgcaggc tatacaagca tgggtgctggc atctgcctgg cttctgggga      600
ggcctcaggg accttttact catggtggaa ggtgaggcag gagcaggcat gccacatggt      660
gaaagcagga gcaagaaaga gtggggaggg tgccatcact taaaaaacca gatcccatga      720
gtattcatta ttgcaagaac agcatcaaac catgaggctt cancccgtgg cccaaacacc      780
ttccaacang ccccaactcg cattaaggat acctttcnaa nntaagggtt ggggggggacc      840
aaatntccca actatatcan tgnttttgaa cagggnctcc agttctttta aatcccgaag      900
aaatttttaa aggantccca acccttttaa ngaaactaaag gtttcccgna nnnngaaaag      960
tttttnnccc ngggggnaaa attnaatgnn tttnccnnaa aaantaantt ttnaaagaaa     1020
nttt                                     1024

```

<210> 90

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 90

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gnagnnnnnn ttnggtncg aattggggccc tctagatgca tgctcgagcg gccgccagtg      60
tgatggatat ctgcagaatt cgcccttagc gtgggtcgcg ccgcggtaca tctcctaaag     120
actaatggtc atttacaat tcaaacatga gataaagtat ttggtgatat gtccatcaag     180
tataactcag aaatcagtaa acaagtcttt tcccaaagta agttccttct aaatgtagct     240
aaaaagagcc actttgtcat taaagtgaat gagtatgcat ttttagaaca gacttgatgt     300
ttggattgtg ttaaacatat gtctgttagt gaaagtgtta gtcacaaaga taaaatttca     360
tctaaaaata atatatagag aaaaatgcaa taaatataca catggtaaaa tacttctctt     420
ttctgtaaac ttttagttct ttataagggt tgtgatatac tttaaaaatt tttctgtatt     480
gaaagaaact ggagacactg ttcatagcag ctgatatagt ttggatattt gtccccaccc     540
aaaccttata ttgaaatgta atccttaatg cggagggtggg gcctggtggg aggtgtttgg     600
gccacggggg tggagcctca tgggttgatg ctgttcttgc aataatgaat actcatggga     660
tctggttttt aaagtggatg gcaccctttc ccactctctc ttgctectgc tttcaccatg     720
tggcatgcct gtcctgcct caccctcacc atgagtnaaa ggnccctgang cctcccagaa     780
gccangcaga tgccancanc attgcttggg tagcctgcan aacttctttt ctttataaaa     840
taccccaacc tnaggcntta tgccatgctt gaacaaccgt aatncntanc ccaanggtcn     900
aaccaaccca ggtccattgg nngggcnaag gnttaacnaa acnggnntc centgcncna     960
nnnncccccn ggggnaaatg gcaacccttn aaaanaagnn tncctgganc cngnnnnncc     1020
nttt                                     1024

```

<210> 91

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 91

```

gggnnnnnnt aattancgcc ngcttggtac cgagctcgga tccctagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggctgc ggccgaggta ccttggaaagt tatgtcatta     120
atataggctg gttcatcaaa taaagcaaaa ccttgcaata tcagctagat ttacactccg     180
ggacgttgcc caaaggtagg aagaaagcag agggaaatat ttcagtcatc atttccaaag     240
tcattatcaa aatctgtgag gaagttaa cttccaaaga gtcaatgtca gacatcaggc     300
ctctgttgcc tgcttctctc gaggcactag attaggagtc ttcaataaga gacttaacat     360
gaggtatatg gaagatgagg caccgagata agttcatcat taggtgtgag cactgctcac     420
ccttgctggc aagttctcct taagggcctg aagcacaggt gtccaaagaa aagcgtaaag     480
tccatcttaa tagaatctat gtggtatatg atgtgggtcag ccctgggtct gtgatcagca     540
agaacctaca gcacagatta tgccctgccc acttcaatga atacctactc tcctccattc     600
tccatcactt tttttgctat caagaactcc ggaccttgcc catgggagaa gtttagagag     660

```


| | | | | | | |
|------------|------------|------------|-------------|------------|------------|------|
| gaactcttgt | ggagaactgg | tttattttct | gccctgtgcc | gacgagtttc | agctggccaa | 720 |
| gaaaggagtc | aagtatttaa | aaagcatcac | aatggagatc | ttccaggctg | ggtttttttg | 780 |
| tttttggtgg | taaaactggg | ggaaaanggg | actattttatt | ctggccttaa | atcaatnggc | 840 |
| aaattaagtc | aagaagaccn | ttttgggaat | gtngactatg | gatnccctcc | taatngaag | 900 |
| gagnagcctt | aaaaaggggg | caangtaang | gttttcnggt | atggaagcca | aaanttttnc | 960 |
| cggctnaatg | ggntggntnn | ccaatattnn | taccggcccn | aaanggggnt | tttncnnngg | 1020 |
| gtcc | | | | | | 1024 |

<210> 92
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|------|
| <400> 92 | | | | | | |
| nngnnnnnnt | tnngantggg | ccctctagat | gcatgctcga | gcgccgccc | gggcaggtag | 60 |
| tgcattcata | atttatcgcc | atgtgcaaca | gctttgcgtt | ttctaaggca | caatttttaa | 120 |
| tgaaatgatg | tgtagatttc | aatctaataa | cagctcatcc | aaatgacaaa | tatggctcga | 180 |
| atccctccag | tggctgagga | aattttctga | cctatatgga | acccacatgc | aaagaaccca | 240 |
| tctagcatgt | aataaataat | cgctagccat | actcaataag | acacggaaaa | attattgctt | 300 |
| acataacaga | aaaacatcta | cttgaccccc | ttttatgact | acatcaatct | attaggagtg | 360 |
| tatccatagt | ctacattcac | aaaatgtcat | cttgacttat | ttgccattga | tttaaggcag | 420 |
| aataaatagt | ccccctttcc | ccagtcttaa | caacaaaaaa | caaaaaacca | gcctggagat | 480 |
| ctacattgtg | atgcttttta | ataacttgac | tcctttcttg | gccagctgaa | actcgtcgca | 540 |
| cagggcagaa | aataaaccag | ctctccacaa | gagttcctct | ctaaacttct | ccatgggcaa | 600 |
| ggtccggagt | tcttgatagc | aaaaaaaagt | atggggagaat | ggaggagaag | taggtattca | 660 |
| ttgaagtggg | cagggcataa | tctgtgctgn | aggttcttgc | tgatcacaga | ccaagggctg | 720 |
| accacatcat | ataccacata | gattctatta | agaatggact | taacgctttt | ctttggacac | 780 |
| ctgtgcttta | ngccctttta | ggagaacttg | ncanccangg | gtgagcagtg | cttcacacct | 840 |
| taaggatgaa | cttaaatctc | ggggcctcat | cttccatata | nccctaaggg | taagnctctt | 900 |
| taatggaaga | ctcctnaatt | agnggccttg | aaaagaagca | ggcaccgcga | gggcctgagg | 960 |
| ctgacattgg | ctcttttnga | agaataaact | ttccttaccg | naatttgga | aaggaccttt | 1020 |
| ggaa | | | | | | 1024 |

<210> 93
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| <400> 93 | | | | | | |
| gngnnnnnnt | taactccagc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gcccttagcg | tggtcgcggc | cgaggacttt | tttcaaatgt | cactgaaaga | 120 |
| attgtttttg | taacagtatg | caaaatgata | ctgtattggt | agaacaaaaa | tctgtggagt | 180 |
| gttaatactt | tgaagccaa | attaaagttt | ctaagcagta | taaaatgaga | atgacatcat | 240 |
| cctttcctag | tatttccaag | tcttagagta | ctctacaccc | tgttggtctat | ttatctgggg | 300 |
| ttagacttct | ggagactttt | cagatagact | tgaagtctct | ggccttgcc | gggaattact | 360 |
| ggctgcccc | ggaagcactg | gagaaggcgg | tggctcctct | gcccttggtg | tcctgctgtg | 420 |
| gcgcattttg | attgagttcc | tggttcggct | ggtcagagtg | gctggatagt | gttggcccac | 480 |
| tccatttcctc | aggttttttt | gaagcgggtg | tcttttaggg | agagcctttt | gttcctggaa | 540 |
| cttccttgac | gggtcccttt | tcccttctgg | gttgtcttgg | gaacctcttt | ggtgttgatg | 600 |
| ggttggtgtg | ggaaaatggg | ctggaggctc | gtggtttctc | ggacatcttc | accagaccag | 660 |
| tgtctctcaa | cagtctactc | cagtcacact | ggtctncccg | agcttcccca | ggacagttaa | 720 |
| ngcaggccac | aggctanaaa | ctgtagtctc | ccgacattac | aagccaattt | gggnctgtgg | 780 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| gctctgnttt | ccaaatcaac | cctttcanct | tcatttggaa | nccattcag | gaaanccccg | 840 |
| cgtaccttgc | ccgggcgggc | cgttcnaaag | ggcgaattct | gcanaaatcc | cttanacttg | 900 |
| ggnggnccgt | ttnaacctgc | cttttaaaag | gcccaattnn | nccctntnna | nnggagcgan | 960 |
| taccaattnn | ntnggnccgc | gttttnaaaa | cgnnnnnann | tnggnaaaaa | ccctggggtn | 1020 |
| cccc | | | | | | 1024 |

<210> 94
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|------|
| <400> 94 | | | | | | |
| ttnngaattg | ggccctctag | atgcatgctc | gagcggccgc | cagtgtgatg | gatatctgca | 60 |
| gaattcgccc | ttcgagcggc | cgcccgggca | ggtacgcggg | gcttcctgga | tggggatcca | 120 |
| gatggagggtg | gaggggtgat | ttgggaagca | gagcacagca | gcacaaatct | gcttgtaattg | 180 |
| tcggcgacta | cagtttctag | cctgctggcc | tgcccttact | gtcctggggg | aagctcgggg | 240 |
| agaccagggtg | gactggagta | gactgttgag | agacactggg | ctgggtgaaga | tgtccaggaa | 300 |
| accacgagcc | tccagcccat | tttccaacaa | ccacccatca | acaccaaaga | ggttcccaag | 360 |
| acaaccaga | agggaaaagg | gacccgtcaa | ggaagttcca | ggaacaaaag | gctctcccta | 420 |
| aaagaccacc | gcttcaaaaa | aacctgagga | atggagtggg | ccaacactat | ccagccactc | 480 |
| tgaccagccg | aaccaggaac | tcaatcaaaa | tgcgccacag | caggaccaca | agggcaagga | 540 |
| gaccaccgcc | ttctccagtg | cttccttggg | cagccagtaa | ttcccaggca | aggccagaga | 600 |
| cttaagtcta | tctgaaaagt | cttcagaaag | tctaacccca | gataaatagc | cnaacagggt | 660 |
| ggagagtact | cttaagactt | ggaaatctta | ggaaagggat | gatgtcantc | tcattttata | 720 |
| ctgnttaaaa | actttaantt | ggcttacaag | tattaaccct | tcacagaant | ttgtctacca | 780 |
| tncagnatca | atttggcatc | tggtccaaaa | ccattttttt | agggcanttt | gaaaagtctc | 840 |
| tnggcgggga | acaccttaag | ggcgantcca | gncaacttgg | nggncgtnan | nnnaaggctc | 900 |
| caactcgunc | caaannttgn | gnaaacatgg | gnnnanattg | gntcctgggg | ggaaatgtat | 960 |
| ccgnttacia | nttcccncaa | ntnncnaanc | cggannncnt | taagggtaaa | nncctggggg | 1020 |
| gccc | | | | | | 1024 |

<210> 95
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|-------------|------------|------------|-----|
| <400> 95 | | | | | | |
| gggnnnnnnt | taactccagc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gccctttcga | gcgccgcgcc | gggcagggtac | tttttttttt | tttttttttc | 120 |
| cgtctcccca | aagctttatc | tgtcttgact | ttttaaaaaa | gtttgggggc | agattctgaa | 180 |
| ttggctaaaa | gacatgcatt | tttaaaacta | gcaactctta | tttctttcct | ttaaaaatac | 240 |
| atagcattaa | atcccaaatc | ctattttaaag | acctgacagc | ttgagaagg | cactactgca | 300 |
| tttataggac | cttctggttg | ttctgctgtt | acgtttgaag | tctgacaatc | cttgagaatc | 360 |
| tttgcatgca | gaggaggtaa | gaggtatttg | attttcacag | aggaagaaca | cagcgcagaa | 420 |
| tgaagggcca | ggcttactga | gctgtccagt | ggagggctca | tgggtgggac | atggaaaaga | 480 |
| aggcagccta | ggcctggggg | agcccagtcc | actgagcaag | caagggactg | agtgagcctt | 540 |
| ttgcaggaaa | aggctaagaa | aaaggaaaac | cattctaaaa | aacaacaaga | aactgtccaa | 600 |
| atgctttggg | aactgtgttt | attgcctata | atgggtcccc | aaaatgggta | acctagactt | 660 |
| cagagagaat | gagcagagag | caaaggagaa | atctggctgc | cttccatttt | cattctgnta | 720 |
| tctcaggtga | actggtanan | gggagacatt | ngaaaaaaat | gaaacnacca | aaaccattac | 780 |
| taatgaggtg | ccttnggncc | gggaacacgc | ttaaggcgaa | ttttgcagaa | atncattaca | 840 |
| ctggcgggcc | gttcagcatg | cttttaaaag | gcccaattnc | cctttaaggg | agtcgnatta | 900 |

```

caatttnant gggccgcgtt ttacaacgtn nggaactggn aaaacccctg gggtnnccca 960
cttnaannnc cttggnnnan aatccccctt tncnnaantg gggnnnnnnn ccaaaggccc 1020
cnaa 1024

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<210> 96
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

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<400> 96
gngnnnnnnn tnngttnnca ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg 60
atggatatct gcagaattcg cccttagcgt ggtcgcggcc gaggtacctc attagtaatt 120
gttttgttgt ttcatttttt tctaattgtc cccctctacc agctcacctg agataacaga 180
atgaaaaatgg aaggacagcc agattttctc tttgctctct gctcattctc tctgaagtct 240
aggttaccca ttttggggac ccattatagg caataaacac agttcccaaa gcatttggac 300
agtttcttgt tgttttttag aatggttttc ctttttctta gccttttctt gcaaaaggct 360
cactcagtc cttgcttgct cagtggactg ggctccccag ggcctaggct gccttctttt 420
ccatgtccca cccatgagcc ctccactgga cagctcagta agcctggccc ttcattctgc 480
gctgtgttct tctctgtgta aaatccaata cctcttacct cctctgcatg caaagattct 540
caaggattgt cagacttcaa acgtaacagc agaaccacca gaaggtccta taaatgcagt 600
agtgaacctc tcaagctgtc aggtctttta ataggatttg ggatttaatg ctatgtattt 660
ttaaaggaaa gaaataagaa ttgctagttt taaaaatgca tgtcttttaa ccaattcaga 720
atctgcccc aaactttttt naaaagtcaa ggaccgataa agctttgggg agacngaaaa 780
aaaaaannnn aaaaagtacc tgcccgggcn ggccggtcna aaggcgcaaa ttcaacacac 840
tgggcggccg gtacttaatg gatcccaact cggncccaac cttggggaaa ncatgggcn 900
taactgggtt cccggggggg aaatgggtatt ccggttacaa attccccccc annttccana 960
cccggaaanc cnttaagggt aaaanccctg gngggccnna anggggggct nacctcccct 1020
tnaa 1024

```

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<210> 97
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

```

```

<400> 97
gngnnnnnnn nttnnnttat acgccangct tggtagcgag ctcggatccc tagtaacggc 60
cgccagtgtg ctggaattcg cccttagcgt ggtcgcggcc gaggtacatc tgattttata 120
tgttgtccaa actggtcaat ccagttgctt aacacagaaa gcggacagat gatcagtgtt 180
gttcttggtc tctcctcaac atcagttttc tttgacccct ccactgcaca agctcccttt 240
ttcaacattt tcttttttgt tgtaggaaca gatgaagtta atgcacatgc aaatgccaca 300
tcttctataa ccttagaaga tcctttcgcc ctgccttttag tttcagactg tacagagggg 360
gagagagaga gaaagagagc acgccagtga gaaagcgagc gcgagcgca gcgcaagggg 420
aggagagggg gggagagggc ggaaggggga aagctgtccg tgggagattg tgtcttcatt 480
tccacggggc tgcattctct gatggtgcac tgaaaaagca gagctcacca gacagagtgg 540
aaaggcaggg ggaggggcag ggagcaacag aaggaagaga caacaagccc aagacagctt 600
ccatctcaga cggaaggccc ccagaagata gaattccagc cgactgaaaa accaccaat 660
gaacaaagaa gattctagaa aatagaagtg ttgggattac aaagtngnc gtttcatcgg 720
tacctgcccg ggcgngcngt caangggcga attctgcaga tatccatcac actggcggn 780
gntcgagcat gcatntagan ggccaantc gncctataag ggagtcgnan tacaattcac 840
ttgggcgcg ttttacaacg tctgacttgg naaaanccct gnggttnccc aacnttaaac 900
ggcnttggag nacaattccc ctttttncca anntggggna antnaccaaa agggccccc 960
accgatggnc cttttncaaa aagtggggc aaccttgaaa gggcaaaagg gccccccct 1020

```

ttaa

1024

<210> 98
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 98
gnngnnnnnn ttngaagtgg gccctctaga tgcattgctcg agcggccgccc agtgatgatgg 60
atatctgcag aattcgccct tgagcggccg cccgggcagg taccgatgaa acgcgcaact 120
ttgtaatccc aacactttct attttctaga atcttctttg ttcattgggt gggttttcag 180
tcggctggaa ttctatcttc tgggggcctt ccgtctgaga tggagagctgt cttgggcttg 240
ttgtctcttc cttctgttgc tccctgcccc tccccctgcc ttccactct gtctgggtgag 300
ctctgctttt tcagtgcacc atcaagagat gcagccccgt ggacatgaag acacaatctc 360
ccacggacag ctttccccct tccgccccct cccaccctct cctccccctg cgctcgcgct 420
cgcgctcgct ttctcactgg cgtgctctct ttctctctct ctctccctct gtacagtctg 480
aaactaaagg cagggcgaaa ggatcttcta aggttataga agatgtggca ttgcatgtg 540
cattaacttc atctgttctt acaacaaaaa agaaaatgtt gaaaaaggga gcttgtgacg 600
tggagggggtc aaagaaaaact gatgttgagg agagaccaag aacaacactg atcatctgtc 660
cgctttctgt gtttaagcaac tggattgaca gtttggacaa catataaaaa tcagatgtac 720
ctcgngcgcg accacgctta gggcggaattn cagcacactg ggcggccgtt acttaatgga 780
tccgaactcg naccaagcct tgcgtaaaca tgggcaatac tggnttctct nggggaaatg 840
gtaatccggt taaaaattcc ccacaacntt acaanccgga agcccttaag ngtaaaaccc 900
ctggngcccc caaagagtga gctaacttnc catttaaatg cgttngctca atggcccggt 960
ttccatcggg naaaacctgn ngccantgga ttaangaatc ggncaaancc cccggggnaa 1020
aaan 1024

<210> 99
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 99
aacgccagct tggtagcgag ctccgatccc tagtaacggc cgccagtgtg ctggaattcg 60
ccctttcgag cggccgcccc ggcagggtaca gataaatccg tgcattgcatt gagggagact 120
agagggtaaa atgaaatctg ccccatcctt cttacatata cagtgatagc attttgaatt 180
gttcttctac atttgaaatc ttagctgaaa gatcatcagc caccgacctt ttgtgaagct 240
agttctctag aacatacaat gttttttaa aaattaaaaa cacagaagga aaaaagcaag 300
aaccaacgat aaatggagct tgtgcagaat ctggcagtgct tgtggacctg cccatctgtt 360
ctcccccgcg tactgactga acacactccc cgcttttggt cctgtaggac gggtagagata 420
ccacaccttg gcaaccacca gtaaaggctc atagtctagc ccttgggagg cccgatttt 480
agggtctgtc tcggaggcga cctacgttag ggactgggag aagcgggtac ctggcccgcg 540
accacgctaa gggcgaaatc tgcagatata catcacactg gcggccgctc gagcatgcat 600
ctagagggcc caattcgccc tatagttagt cgtattacaa ttcaacttggc ccgtcgtttt 660
acaacgtcgt gactgggaaa accctgcgtt taccacaactt aatcgccctg cagcacatcc 720
ccctttcgcc agctgcgtaa taacgaaaag cccgnaccga tcgccctttc cacagtgtcg 780
caacctgaat ggcnaatgga ccccccttg taccggcgca ttaaccnccn gccggnntnt 840
ggggatcccc cacgtggacc gggtcacttg gccagggccc taangnccgg ttcntttggt 900
ttcttneett ccntttttng cccgttngcc nggttttttc cgtaagcttt taaanngggg 960
gcttccccct ttanggggtc aaataangct ttacgggncc tttaaccccc aaaaaattt 1020
nnnt 1024

<210> 100
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 100
gggnnnnnnnn ttnggttcng aattggggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtagc cgcttctccc 120
agtccttaac gtaggtcgcc tccgagcaca gccctaaaat cggggcctcc caagggctag 180
actatgagcc ttacttggtg gttgcccaagg tgtgggtatct caccgcgtcct acaggaacca 240
aagcggggag tgtgttcagt cagtacgcgg gggagaacag atgggcaggt ccacagcact 300
gccagattct gcacaagctc catttatcgt tggttccttg ttttttcctt ctgtgttttt 360
aattttttaa aaaacattgt atgttctaga gaactagctt cacaaaaggt cgggtggctga 420
tgatctttca gctaagattt caaatgtaga agaacaattc aaaatgctat cactgtgtat 480
gtaagaagga tggggcagat ttcatattac cctctagtct ccctcaatgc atgcacggat 540
ttatctgtac ctgcccgggc ggccgcctga aagggcgaat tccagcacac tggcggccgt 600
tactagtggg tccgagctcg gtaccaagct tggcgtaatc atggtcatag ctgnttcctg 660
tgtgaaattg ntatccgctc acaattccac acaacatacg agcccggaag ccataaagtg 720
tnaaagccct ggggtgcctn atgagtgagc taactcacat ttaattgcgt tgcgctcact 780
ggcccgnttt cagtcgggaa aactgcntgc cactgcttaa tgaatcggcc acgccccggg 840
gaaaaagcgn ttgcgtantg ggcgctnttc cgctttcttg gtttaactgac tcnttgggct 900
ttggccttng gnttngggnn aacgggttna acttncnttn aaangggggn naatccggtn 960
tnccccgaaa nncggggata acccccggaa anaactttgn ccnaaaggcc cccnaaangg 1020
cccn 1024

<210> 101
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 101
gggnnnnnnt tgaatnacac gccagcttgg taccgagctc ggatccctag taacggccgc 60
cagtgtgctg gaattcgccc tttagcgtgtg cgcggccgag gtacgcgggt attttcttaa 120
atttcttgaa tggtctttat ggtagtgtta ctaaaaagtt tatgatcaca ttttcattgt 180
gaacataatt tgaactcatt atcacacact tggaaaatac agaaaagtgg aggaaaaaaa 240
atcatatccc caccatccaa agacatatac tctcctctta tcttggtcat tcttgtttct 300
gtgcacaggt ttatgattat aactgtgtca aaatgtatat tcaaaatagc tgttacatta 360
cctttgtgga attatggtta aatactttca cttaattttt ttcaaatggt ccctataata 420
atgttctgat aacagtgtat tatgtgtgtc tccattgggtg tgcataatac ataccagag 480
gaaaaattag aaaataaagt aaattatttt aaaaaattac ctatattccc aacacctaac 540
aactactgct aacatcttga tctgtttcct ctatcttgtt tcaagtgcaca cgcttgtgat 600
aacagtgtta aatatgtgtg cataaagtct taaatgaaaa gatgtggaaa ataactaaaa 660
tagtgtgtgc attgtgggaa tttgggttaa tattttgtct caaattcctt aaataatctt 720
tgggtgtttg gtaataaatt ttaatgatgt attttccatt acaaataata tacatactca 780
tacaaaactt tggaaaatta gtaagaaaaa ttccacacata tccccacacc caacaccaat 840
ttaactggtn accatctgga ctgngcncat agctgggatt antttaggng tagtggataa 900
gtatgcctaa aggccaaaaa tgggaagaag gatgaaaanc cngaaaatan ttnccttgg 960
gtnnngggaa taagggaat ttgggttcgg ttcctttgaa agggcatnnn tttcaagggg 1020
tttg 1024

<210> 102
<211> 1020

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 102

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|------|
| ggagnnnnntt | aaacgccagc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gccctttcga | gcgcccgccc | gggcaggtag | tctttctctc | ccctcctctg | 120 |
| aatttaattc | tttcaacttg | caatttgcaa | ggattacaca | tttcaacttg | atgtatatgt | 180 |
| tgttgcaaaa | aaaaaagtgt | ctttgtttta | aattacttgg | tttgtgaatc | catcttgctt | 240 |
| tttccccatt | ggaactagtc | attaacccat | ctctgaactg | gtagaaaaac | atctgaagag | 300 |
| ctagtctatc | agcatctgac | aggtgaattg | gatggttctc | agaaccattt | caccagaca | 360 |
| gcctgtttct | atcctgttta | ataaattagt | ttgggttctc | tacatgcata | acaaaccctg | 420 |
| ctccaatctg | tcacataaaa | gtctgtgact | tgaagtttag | tcagcaccct | caccaaactt | 480 |
| tatttttcta | tgtgtttttt | gcaacatatg | agtgttttga | aaataaagta | cctcggccgc | 540 |
| gaccacgcta | aggcggaatt | ctgcagatat | ccatcacact | ggcgccgct | cgagcatgca | 600 |
| tctagagggc | ccaattcgcc | ctatagttag | tcgtattaca | attcaactgc | cgtcgtttta | 660 |
| caacgtcgtg | actgggaaaa | ccctgcgtta | cccaacttaa | tcgccttgca | gcacatcccc | 720 |
| ctttcgccag | ctggcgtaat | aacgaaaagc | cccggaccga | tcgccctttc | caacaggtgc | 780 |
| gcaacctgaa | tggcgaaatg | gacccccctt | ggaaccggcg | cantaaacc | ccgncggggn | 840 |
| nntngggtag | ccccacggg | ganccgttca | cttggccann | gccctaangn | cccgcttctt | 900 |
| tnggtttctt | tccttctctt | ttgcccgttt | gnccgggttt | tcccggnaag | ctttaaaaac | 960 |
| gggggcctcc | ccctttangg | gtccnaataa | nggcttttac | gggnccttng | aaccccaaan | 1020 |

<210> 103
<211> 1021
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1021)
<223> n = A,T,C or G

<400> 103

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|------|
| ggagnnnttn | ngnnngggcc | tctagatgca | tgctcgagcg | gccgccagtg | tgatggatat | 60 |
| ctgcagaatt | cgcccttagc | gtggtcgagg | ccgaggtagt | ttattttcaa | aacactcata | 120 |
| tgttgcaaaa | aacacataga | aaaataaaagt | ttggtggggg | tgctgactaa | acttcaagtc | 180 |
| acagactttt | atgtgacaga | ttggagcagg | gtttgttatg | catgtagaga | acccaaacta | 240 |
| atttattaaa | caggatagaa | acaggctgtc | tgggtgaaat | ggttctgaga | accatccaat | 300 |
| tcacctgtca | gatgctgata | gactagctct | tcagatgttt | ttctaccagt | tcagagatgg | 360 |
| gttaatgact | agttccaatg | gggaaaaagc | aagatggatt | cacaaaccaa | gtaattttaa | 420 |
| acaaagacac | tttttttttt | gcaacacaat | atacatcaca | gtgaaatgtg | taatccttgc | 480 |
| aaattgcaag | ttgaaagaat | taaattcaga | ggaggggaga | gaaagagtag | ctgcccgggc | 540 |
| ggccgctcga | aagggcgaat | tccagcacac | tggcgggcgt | tactagtggg | tccgagctcg | 600 |
| gtaccaagct | tggcgtaatc | atggtcatag | ctgnttcctg | tgtgaaattg | gtatccgctc | 660 |
| acaattccac | acaacatacg | agcccgggaag | cataaagtgt | aaagccctgg | ggtgcctaata | 720 |
| gagtgaagta | actcacatta | aatgcgttgc | gctcactggc | cgctttncag | tccgggaaac | 780 |
| ctgtcgtgcc | agctgcatta | atgaatccgg | ncaacgcccc | ggggaaaaag | cggttgcgta | 840 |
| ttgggcgctc | ttncgctttc | ttggttactg | gctccttgng | cctcggccgt | tccggnttcg | 900 |
| gnnaaccggt | atcagcttac | ttcaaangcg | gnaaatccgg | tttnccnga | aatccggggg | 960 |
| ttaacnccag | gaaaanaacc | tttgaaccna | aaggggcccn | aaaaggggcc | ggaaccctaa | 1020 |
| a | | | | | | 1021 |

<210> 104
<211> 1017
<212> DNA
<213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1017)
 <223> n = A,T,C or G

<400> 104
 ggagnnntta atcnacgccn gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
 gtgctggaat tcgccccttag cgtgggtcgcg gccgaggtag tcagctgtct taataggatg 120
 aagccttaag cagtggaaat ttcagttatt ttccacagta ttccattttg gaggatttgg 180
 ggtgtttact ttttaaattc ttgaacaact taacctccat gaggctttgt gaagtcagct 240
 gtgaccaccc tcctcttact gtgttctcag tattcattca cttccaggga agaatacag 300
 ccacagggag atggtggtgg gcaagaatga gagtcccagg atccagattt agcctcagat 360
 cttccccatt caggaagggt tttccattta acaagagcac tagtatgaaa acattaggga 420
 caaatctccc atgtctttga aattcggatt ctctctttga gatccccctc ctcacctgcc 480
 aatcaacttt ataaggccac aagtggtcac tggttttcct tccacagggt tgaggttctc 540
 agctttcctt aagcgacca gcagctccgc tgttttcaga gtgaatatgt taagctttga 600
 tgagattcta ttttcagtaa gttagtgtct ctgggacact tggagaaagc tgtgagagtc 660
 attggctacg caaagaacaa cgaaagctga tcctaaaagt gatccaatct aagaaaaatgg 720
 taaaacgagc tctggccaca gcacagaatt ttatgtgang aactcagatt tttgaagact 780
 taacaattgc agaaaaaggn tgcagcctgn acaccatag cccaactttt ntgagccana 840
 ctttggtttt tggnggggga cntggcacca tgtttgnacc tggccggccg gnccttcna 900
 aagggccaaa ttntggcnga aatnccttac actggggggc cgtttgagca tgcctntaaa 960
 ngggcccaan tngnccctta aaggggggcn nnttccaatt nnctggggcc ggttttn 1017

<210> 105
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1024)
 <223> n = A,T,C or G

<400> 105
 ggagnnnntt nnntnnngan tgggccctct agatgcatgc tcgagcggcc gccagtgtga 60
 tggatatctg cagaattcgc cctttcgagc ggccgcccgg caggtagaaa catgtgccac 120
 gtcaccacac aaaaccaaag tctgtcaga gaggtgggct atggtgtgca ggctgcaacc 180
 tttctctgca attgttaagt cttcaaaaat ctgagttcct cacataaaat tctgtgctgt 240
 ggccagagct cgttttacca ttttcttaga ttggatcact tttaggatca gcttcgttgt 300
 tctttgcgta gacaatgact ctcacagctt tctccaagt tcccagaagc actaaacttac 360
 tgaaaataga atctcatcaa agcttaacat attcactctg aaaacagcgg agctgctggg 420
 tcgcttaagg aaagctgaga acctcaaacc tgtggaagga aaaccagtga ccacttgagg 480
 ccttataaag ttgattggca ggtgaggaag gggatctcaa gaggagaatc cgaatttcaa 540
 agacatggga gatttgctcc taatgtttc atactagtgc tcttgtaaaa tggaaaacc 600
 ttctgaatg gggaagatct gaggctaaat ctggatcctg ggactctcat tcttgccac 660
 caccatctcc ctgtggctgt cattcttccc ctgaagtga tgaatactga gaacacagta 720
 aggaaggagg gtggtcaca gctgacttca caaagcccta atgganggtt aagttggtca 780
 agaatttnaa aagtaacccc ccaaaatcct ccaaaaatgg gaatactggt ggaaaaaac 840
 ctggaaattn ccctgggtta aggttcatt ctattaagac cgcttgagta cccttggccg 900
 ngaaccccc taagggcgaa ntncacaca ctggngggc cggtaacctaa nggatcccaa 960
 ctnggnaccc aancnttggg gaaancatng ggccataact ggggtcccgg ggggaaatgg 1020
 taat 1024

<210> 106
 <211> 1007
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(1007)

<223> n = A,T,C or G

<400> 106

| | | | | | | |
|-------------|-------------|------------|-------------|------------|------------|------|
| ggagnnnnntt | aaacgccagc | ttggtaccga | gctcggatcc | ctagtaacgg | ccgccagtgt | 60 |
| gctggaattc | gcccttagcg | tggtcgcggc | cgaggtagac | agaatagctg | agcagttcac | 120 |
| ttcagggatc | aggatcatct | tgctcctcct | agtttcacca | tggtctggca | ataaaaaaca | 180 |
| catattatat | cctggttttc | tctatccttg | cattactaag | gtgactgtct | ctctttatac | 240 |
| atccttgat | ggttctccca | gtattagcaa | gattgtatat | ctgtaaagaa | tgtccagttt | 300 |
| tgtaaatatt | tccctgcctt | tttttttctt | tttttacatc | tgattttaat | gcttcgttaa | 360 |
| cttcaaaagg | aactggtaga | gttcagaagg | tgagctgttg | tttttctaaa | cctcttccca | 420 |
| ggaaggggac | attgacactt | gaatttttgt | cacctttttc | ctcattagaa | ggaaagtaga | 480 |
| aagccttact | gtaggatttt | taaaaaaaaa | tccatctcac | cccatattgg | tcttaaataa | 540 |
| gtatagacta | attaacctaa | gctaccttta | acaacgtaga | atttaanatg | ggttcatata | 600 |
| tgtgagaaaa | acctgaatat | aggacagggg | tcctactttt | ttccccacct | ctgtcgccca | 660 |
| ggctagagta | ntaantgggtg | gatcttgggc | cactgcaacc | tctgcttcta | gggtcaagtg | 720 |
| attctcctgc | tacgctncc | aagtancccg | ggaattggaa | gagtatgcca | ccacgccag | 780 |
| ctactttttg | gaaatttagt | nnaaaacagg | ttcatcatgn | tggncccnga | agggcnctta | 840 |
| antcctgncc | tnagngatc | ccccnnana | ngaaacctg | gncnncccaa | nnnnncngnn | 900 |
| tntagcnnnn | ccrccnggcc | cannctactt | tnnnaannnn | nnnnnnnnnn | nnnnnnnnnn | 960 |
| nnnnnnnnnaa | nnrnnncnnn | ncengnnngn | ccnnnnnnngg | gnaantc | | 1007 |

<210> 107

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 107

| | | | | | | |
|------------|------------|-------------|-------------|------------|-------------|------|
| gnagnnnnnn | nngattgggc | cctctagatg | catgctcgag | cggccgccag | tgtgatggat | 60 |
| atctgcagaa | ttcgccctta | gcggccgccc | gggcaggtag | tttttttttt | tttttttttt | 120 |
| tttttttttt | aattaattag | aaagtaggct | gggcacggng | gctcatgcct | ataatcccag | 180 |
| cacttgggga | ggccgaggat | ctcctctctg | gnggatcact | tgagggcagg | agttaagaga | 240 |
| ccatcttggc | caacatgatg | aaaccctgtc | tctactaaaa | atacaaaaag | tagctgggag | 300 |
| tggtggcata | ctcttacaat | cccggctact | tgaggagctg | aggcaggana | atcacttgaa | 360 |
| cctaggaagc | agaggttgca | gtggggccaag | atcacaccac | tatactctag | cctgggagac | 420 |
| agaggtgggg | aaaaaagtag | gacccctgtc | ctatattcag | gtttttctca | catatatgaa | 480 |
| cccatctaaa | ttctacgttg | ttaaaggtag | cttaggttaa | ttagtctata | cttatttaag | 540 |
| accaatatgg | ggtganatgg | attttttttt | aaaaatccta | cagtaaggct | ttctactttc | 600 |
| cttctaataa | ggaaaaaggt | gacaaaaaatt | caagtgtcaa | tgccccctcc | ttggggaaga | 660 |
| ggtttagaaa | aacaacagct | caccttntga | acttttacca | gttccttttt | gagttaaccg | 720 |
| aagcnttaaa | aatcagatgt | aaaaaaangaa | aaaaaaaaggc | cgggaaattt | ttaccaaact | 780 |
| nggacattct | ttacagatat | acaatcttgc | taaaacctgg | gaaaaccctt | cccnggggtg | 840 |
| ttaaagggga | aacagtcctc | cttataatgc | ccgggggttna | gaaaancccg | gatttttnnaa | 900 |
| aaaggggttt | tattgcccga | aactggggga | accttngggg | ggncccaaaa | nnaacctgan | 960 |
| cccctgaagg | naccgggttn | annnnntttt | tgggaccttg | gccgggaacc | ccctttnngg | 1020 |
| ggnna | | | | | | 1024 |

<210> 108

<211> 470

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(470)

<223> n = A,T,C or G

<400> 108


```

actatgacca tgattacgcc aagcttggtta ccgagctcgg atccactagt aacggccgcc      60
agtgtgctgg aattcgccct ttccgagcggc cgcccggggc ggtactatgt tttttttttt    120
ttttcgtgtn tttagacattc cttgaatctg ttttttatcc cccttcacac gaacaggcct      180
gggactttcc aacaccctgc taagggaagt ctgtgtccaa gtcccaccca ggctgggttg      240
tccccacctn ctncagccca cacagccagc gcagcatccg ggccagtgcc ctgcatgaca      300
nagggctctt gttgtgtaat gnttgttccc aagttgcatt ttctaaccga atcagtgtgt      360
tttcatgaaa ctgagtgtta ctgtggacca gtaagtttct ctgttgtctt cagtggctct      420
cctgtgtggc tcaagggttc tctgtgagag tctggatttt catttctggg      470

```

```

<210> 109
<211> 808
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(808)
<223> n = A,T,C or G

```

```

<400> 109
gggcctctag angcatgctc gacggccgcc atgtgatgga tatctgcaga attcggcctt      60
agcgtggctg cggccgaggt acaagtctgc ctaagagaca gaagtgaagn ttataatcta      120
cttgccatt cctcccagca gagaagcagc aggtagatat ggcatgcact gtgcctgctg      180
ctgctgctct tgtggcgaac actcagatgt ggaaccatag agggaccttg aggagctggg      240
acatgattct ttagagaaga gaagagacgg ggagcacagc atgagaatgg ccagtcaacc      300
catttcaaat tcttttatta aagtgtcccc cgagggggcct tgcacaaaga tgatggggag      360
agcagaactg ctgctccttg acagaactct gatccttaca ctttgttttg agtgggcttg      420
gggacagtca caagccatga aacatgaatc caaaatgggc cccagatgag ccatggtgaa      480
ccaacagatg caagcaactt cttaaactgc tctattaaac actgctttat atgtgtcccc      540
atgatacaga aaagtgggat ggggccagcc attccagaaa tgaatatcca gactctcaca      600
gagaaccctt gagccacaca ggaagaccac tgaagacaac agaggaacta ctggtccaca      660
gaaacactca gtttcatgaa aacacactga ttcggttaga aaatgcaact tgggaacaaa      720
cattacacaa caaagaccct ctgtcatgca gggcactggc ccgatgctg ctgggctgtg      780
tgggctggaa gangtgggga caaccac      808

```

```

<210> 110
<211> 471
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(471)
<223> n = A,T,C or G

```

```

<400> 110
actatgacca tgattacgcc aagcttggtta ccgagctcgg atccactagt aacggccgcc      60
cagtgtgctg gaattcgccc ttccgagcgg cgcccggggc aggtacagcg acgtgatgat      120
gtagaggcgc ttcccaccca ggctgagctg gatcatctga gggcctncag ccaccggtt      180
tcccttgacc actaggggct ctggctggga ctttagttcc tcgtcctcca gcaactgcac      240
agggcctccc ttaacaatgc tgccctccag gaagagctgt cctgtgaggc ggggtctctg      300
tgggtcagag atgtcactat gcctcaggtc cccatgcagc cagtgtgctg agtagaggaa      360
gcggtcgtcc agggagagca ggatgtcggg gatcaggcct ggcatttcgg gcagcagcca      420
gcccttcact ttcttggggg gcacctggat caccttctcc actgacctg t      471

```

```

<210> 111
<211> 468
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature

```

<222> (1)...(468)

<223> n = A,T,C or G

<400> 111

| | | | | | | |
|-------------|------------|--------------|------------|------------|------------|-----|
| actatgacca | tgattacgcc | aagcttggtgta | ccgagctcgg | atccctagta | acggccgcca | 60 |
| gtgtgctgga | attcgccctt | agcgtggctcg | cggccgaggt | acttnnttnc | tttntttaca | 120 |
| tctgatttta | atgcttcggt | aacttcaaaa | ggaactggta | gagttcanaa | ggtgagctgt | 180 |
| tgttttntcta | aacctnttcc | caggaagggg | acattgacac | ttgaattttt | gtcacctttt | 240 |
| tcctcattag | aaggaaagta | naaagcctta | ctgtaggatt | tttaaaaaaa | aatccatctc | 300 |
| accccatatt | ggctctaaat | aagtatagac | taattaacct | aagctacctt | taacaacgta | 360 |
| gaatttagat | gggttcatat | atgtgagaaa | agcctgaata | tangacaggg | gtcctacttt | 420 |
| tttccccacc | tctgtcgccc | aggctggagt | atagtgggtg | gatcttng | | 468 |

<210> 112

<211> 813

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(813)

<223> n = A,T,C or G

<400> 112

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|-----|
| attgggcctc | tnnagcatgc | tgcacggccg | ccatgtgatg | gatatctgca | gaattcgccc | 60 |
| tttcgagcgg | cgcgccgggc | aggtaccatg | ctgacttctt | ggtatctttt | anggcctaata | 120 |
| tttcctctcc | ttgagattac | tgtagtgtgt | tccagctaata | ttctatttgg | aaacgagttg | 180 |
| gaacagctga | aaactaggta | ttattgaagg | caaagcagcc | tcacgtcagt | tttttatcag | 240 |
| ctcatttggg | aagttttntt | ttttttntn | ttaattaatt | agaaagtagg | ctgggcacgg | 300 |
| nggctcatgc | ctataatccc | agcacttggg | gaggccgagg | atctcctctc | tggtggatca | 360 |
| cttgagggca | ggagttaaga | gaccatcctg | gccaacatga | tgaaaccctg | tctctactaa | 420 |
| aaatacaaaa | agtagctggg | cgtgggtggc | tactcttaca | atcccagcta | cttgggaggc | 480 |
| tgagggcagga | gaatcacttg | aaccagga | gcagagggtg | cagtgggcca | agatcacacc | 540 |
| actatactcc | agcctgggcg | acagaggtgg | ggaaaaaagt | nagaccctg | tcctatatct | 600 |
| aggctttgct | cacatatatg | aaccatcta | aattctacgt | tgttaaaggt | agcttaggtt | 660 |
| aattagncta | tacttattta | agaccaatat | gggggtganat | ggattttttt | ttaaaaatnc | 720 |
| tacagtaagg | ctttctactt | tccttctaata | gaggaaaang | gtgacaaaaa | ttcaagtgtc | 780 |
| natgccccct | cctggggaag | aggtttaaaa | aat | | | 813 |

<210> 113

<211> 506

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(506)

<223> n = A,T,C or G

<400> 113

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| nccaaacttg | taccganctc | ggatccctag | taacggcana | cattganctg | atacgccaag | 60 |
| cttggtaccg | agctcggatc | cactagtaac | ggncgccagt | gtgctggaat | tcgcccttcg | 120 |
| agcggccgcc | cgggcaggta | cgcggggcct | ctggcgctac | catggcgttt | ggcaagagtc | 180 |
| accgggatcc | ctacgcgacc | tccgtggggc | acctcataga | aaaggctaca | tttgctggag | 240 |
| ttcagactga | agattggggc | cagttcatgc | acatctgtga | cataattaac | actaccagg | 300 |
| atggggccaaa | agatgcagtg | aaagctttga | agaaaaang | ttncaaaaac | tacaatcata | 360 |
| aagaaatcca | acttaccttg | tcacttattg | acatgtgtgt | gcagaactgt | ggtccaagtt | 420 |
| tccagtctct | gattgtgaag | aaggaatttg | ttaaagagaa | tttagttaag | ctactgaatc | 480 |
| ccagatacaa | cttgccatta | gacatt | | | | 506 |

<210> 114

<211> 813

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(813)
<223> n = A,T,C or G

<400> 114
gggcccntnn agctgctcga gcgcccgcca gtgtgatgga tatctgcaga attcgccctt 60
agcgtgggtcg cgcccgaggt acaacttatt ctaaataattt tcattttctg tgttctaaat 120
agaaatatta agttgcagta aaaagagaaa aaaaggctat ttagcattac aaagaatcat 180
atttaaaggc tgcccaatgt agagtctagt gacctgttca ggacacctga aatataatta 240
aatgacaatt atcaagggtt taacaattta taattctaaa ccagaggatt ataaagaagt 300
gcaaattgac ttttacattc aacttttagt aaatgaaggc actcagtatt cttcctgaat 360
aatacattca gtttctcaca ttttatgctt tcatctattc agaattattt catagtaaaa 420
taattctact ttatcacagc tgtgtgacga tttctaaatg taggaaggcc tgtgaaacat 480
gacactgcag ttaaattggt tggcctaagg actaagtaat ttttcttctg ctgaagtttt 540
aagtgcagtat ttgttccaaa caagttctgt tgaaatctca cgctgttgtc aggaatcagt 600
gttacctggt aactgttatt ctatttaatc ttcattatag cagaaatgtg ccaccatggc 660
tttgacatgt tggtaggtat tgtcttccag gcttcaaagc tgcacagagt ctacgtttta 720
gagagtggc acctttgatg tggtagtgag ctgatcatnc actttcttct cagtcaccat 780
cattttgagc tcctttgtgc tggtagcat can 813

<210> 115
<211> 471
<212> DNA
<213> Homo Sapien

<400> 115
accagctatg acctgattac gccagcttg gtaccgagct cggatccact agtaacggcc 60
gccagtgtgc tggaattcgc ccttagcgtg gtcgcggccg aggtaccatg attttgtgtt 120
caggaaacaa agaacatgaa atattacatt cttcagaatg ttttcttctg gccattaaat 180
gaatcaagta aatgaggcaa tgaggcacia ataaggaaat tagatttcag caatattttg 240
atccactgta gctttcagtt tctgaaactt tggaagggcc tacatacttt gtaagaattt 300
ttggcttata ttgttaataa tcaacagagc caagaaaaa tttcttagaa tgttcaaaga 360
caccacctta gccttcttcc cctgcagcta taacattatt tttctaagag aaaaggcaga 420
gagtcctcac aaagccatac cagacttaaa attaccagag aacattttgg t 471

<210> 116
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 116
ttncannggg cccctagagc atgctcgacg gccgccatgt gatggatatc tgcagaattc 60
gccctttcga gcgcccgccc gggcaggtac tttttttttt tttttttttt tttttttgtg 120
tgtgtgtctg aactcctggc ctcaaagtat cttcctgcct cagcctccca aagtcctggg 180
attactggca tgagtcacca cacctggctc attctttttt ttaatatggc tctaaatggc 240
ttttattttt ttttgctttg gcaatttatt tctaggaaat taaataattc tttcattata 300
atcaagggaa tgaaagactt caggaggtcc atagtggagt tcaaaacat atggagtcca 360
ctattctaca agattatata ggcaataata taagtattct aagggtgttt aggtagattt 420
atagatgtta gatttcaaaa tgggttaata agtgtttatg aatttccaag gtgtatcact 480
aacttctcaa gatgaatca tatatagaaa ctatcaaaat tttcctgtgt ctgctgtcaa 540
gaaatgaata atatacactg atataactgt aactcacatc taaagggata gtgcttgaat 600
aagctaattt acaatgagtt caaggatatta ttttaaaatt cttattgncc ttagacaata 660
attatgccaa caaatgtgaa aaatattaaa tctccttctg ntaatttttc cagttttatt 720

acccaaaagt cacacaggta atgcaagtca tgaaataaat caaatgagcc ctctctggag 780
agcctacttt atttaccttg ggaaaatgga tgacatnt 818

<210> 117
<211> 467
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(467)
<223> n = A,T,C or G

<400> 117
accactatga cctgattacg ccaagcttgg taccgagctc ggatccacta gtaacggccg 60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg cagggtactac tggttttctc 120
cctggcttca cgtgtctctg tgttccccta tgcctggggtg tcctcccagt gctttcaggc 180
ttcatctcct tcctaacctc tcctttctat tttttttttt ttttttgaga tggagtcttg 240
ctcagtcgcc cangtcggag tgctaacctc tcctttcatg tggagatgga cagggatggc 300
aggagcactg agtgctcttg acaacaccat tgaagatgat gctgacgac agctaccctg 360
tggagaaggc aggccaggct gggtagaggg ggagctcctt ggaagtcagg gggctctgtaa 420
ggacagcaag gatctctttg tcccaacctc cagcagcctt tatgggt 467

<210> 118
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 118
gggcctctna agcatgctcg acggccgccca tgtgatggat atctgcagaa ttcgccctta 60
gcgtggctcg gcccgaggta cctgggggtct cagggttgct ctgggcctga tcatccactc 120
agatctgtaa ggaggatttg caggatccat ttagaaaagat cctcccttac tccacaagc 180
atggcctttg gctcttaaat acctgtgctg gggttttgta attatagaaa caacaggaac 240
caaaactcat taatgttgag ctacaaacca gagggaagct tctttctcaa aacagggtc 300
aggcctagaa aaatctagtt ttctgaaatc gctagccagc aacagcactg agatggccat 360
cccagaaaca aggccaaacac agaagcacc ctaaaaggctg ctggagggtg ggacaaagag 420
atccttgctg tccttacaga ccccttgact tccaaggagc tccccctctca cccagcctgg 480
cctgccttct ccacagggtg gctgatcgct agcatcatct tcaatgggtg tgtcaagagc 540
actcagtgtc cctgccatcc ctgtccatct ccacatgaaa ggagagggtta gcatccagc 600
ctgggcgact gagcaagact ccactcctaaa aaaaaaaaaa aaaatagaaa ggagagggtta 660
ggaaggagat gaagcctgaa agcactggga ggacacccca gcatagggga acacagagac 720
acgtgaagcc agggagaaaa ccagtgtac ctgcccggcg gccgntcgaa agggcgaatt 780
ccagcacact ggcggggcgt tactagtgga tcctt 815

<210> 119
<211> 811
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(811)
<223> n = A,T,C or G

<400> 119
gggcctctnn agctgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggctcgc gccgaggtag tctatttttt gcttgatgta ttgatgggtc tttcattatc 120

```

tgtgattgac attctatgag taggtgcttt tgctttgcct ataagtcggt attatgaagg      180
aggaatggtg aataagaagg taatttagaa aagcctatat taaatatacc atgaacattg      240
aatatagcaa gatcttattc tctagtgtt atcttagttg ataaattctg tatgtgttat      300
gtgtttgtgt atacatatgt acttaatctg atcgggtatct aaaagaagga aaggatggtc      360
aggaaacatt tatcataaat gttagccaagg atatcaatta gggtagacaa gaataggaca      420
aaaataggcc agagctcctg aggaggtgat atgggtccct tgatttgagc aaaatgacag      480
cctatccaag tggcccagtg tatgcctccc agtagcagtg ggcattgtaa ctgcagcgac      540
cttattttta aaacccaaaa cctagtatgt ggacaaagaa catgacaata tttggtacct      600
gccccggcgg ccgctcgaaa gggcgaattc cagcacactg gcggccgtta ctagtggatc      660
cgagctcggg ccaagcttgg cgtaatcatg gtcatactgt gttcctgtgt gaaattggta      720
tcccgcctac aattncaca cacatacgaa cccggaagca ttaaagtgtg aaagcctggg      780
gtgcctaagt aagtgtgcta ctcacattaa a          811

```

<210> 120

<211> 466

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(466)

<223> n = A,T,C or G

<400> 120

```

anttgcctg attacgcaa gcttggtagc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttgcgccttt cgagcggccg cccgggcagg taccacggtt ttgctccaca      120
ctccttgacc acagggggctc ggacacaaac ccctgtcacc aggagagtca gtcagcacta      180
cttgggaggg cttaaaggaa atttggaaat aaaattccaa agtttggagt aaaaaaattc      240
aagtgttgat tttatattct ttccctttct gacacagcct aaagcgtagg gggaacatgt      300
gtttatctgt gggagataaa caagatggag tcccaaagac tttaacaaaa tattttttta      360
aaaatccact agaatagaaa atacattatt tagatatact ttatgctgag agtgagtata      420
tatgcttgct ctatttaaac ttgtgagaaa aagtggtagc ccttng          466

```

<210> 121

<211> 812

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(812)

<223> n = A,T,C or G

<400> 121

```

ttgggcccnt nnagcatgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc      60
cttagcgtgg tcgcgccgga ggtacaactc tccagggcac aatacgttta cagctgcctt      120
tccttcacat acttttctaa ttcagaacta ctcacaattc taagcaaat cccattcacg      180
aagtctgtcc ataatgcgac cttctctttt tttaacatat acatctttaa aaacaaatat      240
ataaaaaatt cttattttgc tggaatgctt tcaatttttc acattttaca tgatcatcac      300
atttattttc tatattgaaa ggcattgggt ctggtgacat gtcgtgcaaa gccaaaaaaa      360
aaaaaaaaaa aaagggtcgg attgcttttc aattggtcta acacttttcc ttgtctaggc      420
tttggatttt aaagtccatg acagcccccac caccagtaga aacccaagg cttgcatttc      480
ctggtaatcg actggaaacg tcccctgttg gccatgctaa gattccttca acagggtcat      540
cctgcattta ttctcttctt gccccacccc cacaatgaaa caagatagcc cccatatttc      600
taaatgtatc aagggtatcc actttttctc acaagtttaa ataggacaag catatatact      660
cactctcagc ataaagtata tctaaataat gtattttcta ttctagnnga tttttaaaaa      720
aatattttgg taaagtcttt ggggactcca tcttggttat cttccacaga taaacctagt      780
tcccctacg ctttaggctg tggtcagaaa gg          812

```

<210> 122

<211> 467

<212> DNA

<213> Homo Sapien

<400> 122

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| actatgacca | tgattacgcc | aagcttggtg | ccgagctcgg | atccactagt | aacggccgcc | 60 |
| agtgtgctgg | aattcgccct | tagcgtgggc | gcggccgagg | taccatgctg | acttcttggt | 120 |
| atcttttaag | gcctaatttt | cccttccttg | agattactgt | agtgtgttcc | agctaatttc | 180 |
| tatttggaag | cgagttggaa | cagctgaaaa | ctaggtatta | ttgaaggcaa | agcagcctca | 240 |
| cgtcagtttt | ttatcagctc | atttggggag | tttttttttt | tttttttttt | ttttaattaa | 300 |
| ttagaaagta | ggctgggcac | ggtggctcat | gcctataatc | ccagcacttg | gggaggccga | 360 |
| ggatctcctc | tctggtggat | cacttgaggg | caggagttaa | gagaccatcc | tggccaacat | 420 |
| gatgaaaccc | tgtctctact | aaaaatacaa | aaagtagctg | ggcgtgg | | 467 |

<210> 123

<211> 864

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(864)

<223> n = A,T,C or G

<400> 123

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| gggcctctng | agcatgctcg | agcggccgcc | atgtgatgga | tatctgcaga | attcgccctt | 60 |
| tcgagcggcc | gcccgggcag | gtactttttt | tttttttttt | tcttttttta | catctgattt | 120 |
| taatgcttcg | ttaacttcaa | aaggaactgg | tagagtccag | aaggtagagct | gttggttttc | 180 |
| taaacctctt | cccaggaagg | ggacattgac | acttgaattt | ttgtcacctt | tttcctcatt | 240 |
| agaaggaaaag | tagaaagcct | tactgtagga | tttttaaaaa | aaaaatccat | ctcaccccat | 300 |
| attggtctta | aataagtata | gactaattaa | cctaagctac | ctttaacaac | gtagaattta | 360 |
| gatgggttca | tatatgtgag | aaaaacctga | atataggaca | ggggtcctac | ttttttcccc | 420 |
| acctctgtcg | cccaggctag | agtatagtgg | tgtgatcttg | gcccactgca | acctctgctt | 480 |
| cctaggttca | agtgattctc | ctgcctcagc | ctcccaagta | gctgggattg | taagagtatg | 540 |
| ccaccacgcc | cagctacttt | ttgnattttt | agtagagaca | gggtttcatc | atgttggcca | 600 |
| ggatggnctc | ttaactcctg | ccctcaagtg | gatccaccag | agaaggagat | cccttgggnt | 660 |
| tccccaagtg | cctggggatt | attaggcatt | gaagcccacc | cgtggcccca | agccctacnt | 720 |
| tttcttaaat | taaatttaaa | aaaaaanaaa | nnnnnnnnnn | nnaaaaaaaa | ccttttcccc | 780 |
| aaattgganc | ctgggtttta | aaaaacctgg | acccttnaan | gggcntggnt | tttggccctt | 840 |
| tnaaataaat | tnccctaag | gnnt | | | | 864 |

<210> 124

<211> 467

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(467)

<223> n = A,T,C or G

<400> 124

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| antatgacct | gattacgcca | agcttggtac | cgagctcgga | tccactagta | acggccgcca | 60 |
| gtgtgctgga | attcgccctt | tcgagcggcc | gcccgggcag | gtacatgcac | acacacacac | 120 |
| acacacacac | acgtgtctac | tgggctcctt | ttggattttt | tagttcaatc | agaaatcacc | 180 |
| aaacagatca | ataaagaggc | aatgtttaat | gaccgggaaa | ttggtaatgt | gacatcacaa | 240 |
| cactgccttt | aagtgccat | atctaaatcc | aggtagcact | gctgctagca | gaatctgttg | 300 |
| ttttaggaga | caagggtggg | ctgggtatgc | tggctcgtgc | ctataattcc | agcactttga | 360 |
| gagggcaagg | caggagaacc | acattaggct | aggagtttan | gaccagcctg | ggcaacatag | 420 |
| tgagatccca | tctctacaaa | aataaaaaaa | ttagctttcc | agctgct | | 467 |

<210> 125

<211> 833

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(833)

<223> n = A,T,C or G

<400> 125

```

gnnnnnnnnn ngntttnnnn nttaataaga tgagcgtacg gngcctgtaa agcatgctcg      60
agcgggccgcc atgtgatgga tatctgcaga attcgccctt agcgtgggtcg cgggccgaggt    120
acctgatatac gttaactttt cctctttatc tttcttagag atacttcaca tgtgggacag      180
attatatattt ggaaagatgt ccacaacaat attgcccac ccacattgct catcttaciaa    240
tgtgatctca agactcctcc cactgagtgg gtgagaaggg acttatacca ctttcatttg      300
aatctaggca gatctgtgtg acagccttga ccaatagagt atgggttaaag tgatgcccc      360
aggcatgggt gcccatacct ggaatcctgg ttttccggg agggccaggt gggggtagag      420
gtgaggggga tgattgtttg aacacacgag tttgagacta ccctgagcaa cacaatgaga      480
ccctattttt ttttaatgat ttctgaagca gaatcacaaa tagccgtgcg ttttttctt      540
gcgcttttag gatacttact tttaaaaccc agtcaccata ttgttaggaa gcccacaacag      600
cacacataga gagacatacg gagaagccaa ccatagaggt tcctgttgac agctcantcg      660
aggtcttaac caacagtcac acttagctgc cagccatag agtgaagggc ttncagatga      720
ttctaacgcc cagcagttgg gtccccccag cctgtaagcc ttcccagctg aggcctnaca      780
atgatggagc anagaaaagt gtccctgtcc aaattctgac ccatgataaa atg              833

```

<210> 126

<211> 788

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(788)

<223> n = A,T,C or G

<400> 126

```

nnnnnnntnn nnacanttga ctgataccca acttggtacc gactcggatc cactagtaac      60
ggccgccagc gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac gcgggggac      120
agagagaagc gaggttctcg ttctgaggga caggctcgag atcggctgaa gagagcgggc      180
ccaggctctg tgaggaggca agggaggtga gaaccttgct ctcagagggt gactcaagtc      240
aacacaggga acccctcttt tctacagaca cagtgggtcg caggatctga caagagtcca      300
ggttctcagg ggacaggag agcaagaggt caagagctgt gggacaccac agagcagcac      360
tgaaggagaa gacctgcctg tgggtcccca tcgcccaagt cctgcccaca ctcccacctg      420
ctaccctgat cagagtcac atgcctcgag ctccaaagcg tcagcgtgc atgcctgaag      480
aagatcttca atcccaaagt gagacacagg gcctcgaggg tgcacaggct cccctggctg      540
tggaggagga tgcttcatca tccactttca ccagctctc ttttccatcc tcttttctt      600
ctccttcntt ttctnctnct nctnctgcat ctntaatacc aagcacccca naggagggtt      660
ctgctgatga tgagacaccc aaatncttcc anagtgtcna anatagcctg ntnttcccc      720
cttngnctnt gctttccctt ncnttanatt naatnctgat taaggggttc cancanncca      780
aaaggaat

```

<210> 127

<211> 766

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(766)

<223> n = A,T,C or G

<400> 127

```

gggcctctna agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt      60
cgagcggccg cccgggcagg tactccaggt agttttcctg cacccaatct tgggtgagca      120

```

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| gcttcctggg | ctccccataa | atgaggtgct | ccatcccatc | atacagcccc | atcatattca | 180 |
| gtgcttccca | gatgacctcc | tcaggggtgc | agtagccctc | tatgaagatt | atgcttagga | 240 |
| taagtatgag | aatgccagtc | ttgggcatgc | tctggacatc | actcagcatc | ccatcatagg | 300 |
| tgaggccccag | ggaggtgaca | aggacaaagg | agtggccagt | gggatccact | tcctttacat | 360 |
| caatgccaaa | gaccagcagc | atgcactcgg | aggcttcact | aaacaacaaa | gggaagtggg | 420 |
| cttcataatt | ttttatgaca | ctctccagta | tttctgcctt | tgtgatcggc | tccttcattt | 480 |
| gatacttgaa | gagcagaaac | tgacacaaat | cagtcacctt | ttcatctatc | tcacttctgg | 540 |
| gtaaagactc | actgtctggc | aggacctgta | gggtgcttgg | actctcctcc | ttttggctgc | 600 |
| tggagccctc | atcagattga | tctaattggaa | gggaagcaac | gaccganggg | gaggagcagg | 660 |
| ctatctgagc | actctgggga | ggatttggtg | tctcatcatc | agcagaaacc | tnctctgggg | 720 |
| tgcttgggta | ttagangatg | gcaggaagaa | gaagangaag | aggaag | | 766 |

<210> 128

<211> 779

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(779)

<223> n = A,T,C or G

<400> 128

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| gnnnnntnnn | nacactantt | tnngaccn | canctggtag | cgactcggac | cactagtaac | 60 |
| ggccgccagt | gtgctggaat | tcgccctttc | gagcggcccc | cccgggcagg | tactcctcat | 120 |
| cctgcgtttg | gtctccaggt | gtcgcccttc | tgccgtgttc | ctaataattt | gattcctgtc | 180 |
| ttgaaaaaag | cacctgctgc | acagtaagcc | cagggatgtg | gcagctgcag | cgggcttggc | 240 |
| ttgtgagga | accgggtgtg | tccacgttgg | gggaacatca | tacttgatac | acacgttttt | 300 |
| atgtgcacaa | agaaaatgct | atttttggag | ccagaatttt | catgtctgat | ttatggtgat | 360 |
| tttcttaaga | accagaactg | ctggcagaaa | gggggcaccc | acacgcttag | atagccgatg | 420 |
| tcttattaga | gggcagtttg | tggttcctga | tttggaaatt | aatattctcc | aaacattcca | 480 |
| gtccaatgaa | agttttatcc | gctttcccat | gtaaaaatc | ttcccatgag | agtgacttga | 540 |
| tcctcacaat | cccgttgaag | tcgtgtgtga | gtcctacagt | attaggttca | gcattgccgt | 600 |
| ctncaagtgc | tctttgtagg | gaaacagttt | ctggctcatga | caagcttcca | cttccatctg | 660 |
| atcctggcct | ggcctggaaa | cagagcacat | gtgtttgagg | atggcngtgt | ttggggacag | 720 |
| gacatgancg | tattgtgtgg | ggctgctagg | acangcgtgg | tgtggtgggg | gantgtccn | 779 |

<210> 129

<211> 774

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(774)

<223> n = A,T,C or G

<400> 129

| | | | | | | |
|------------|------------|-------------|------------|-------------|-------------|-----|
| ttnnnantgg | gcccntngag | catgctcgac | ggccgccatg | tgatggatat | ctgcagaatt | 60 |
| cgcccttagc | gtggtcgcg | ccgaggtacc | tgggtgggac | tgggaaactg | tgaaacaagt | 120 |
| agactgactt | ggacactccc | ccaccacacc | acgcctgtcc | tagcagcccc | acacaatacg | 180 |
| ctcatgtcct | gtccccaac | accgccatcc | tcaaacacat | gtgctctgtt | tccaggccag | 240 |
| gccaggatca | gatgggaagt | ggaagcttgt | catgaccaga | aactgtttcc | ctacaaagag | 300 |
| cacttgagga | cggcaatgct | gaaccttaata | ctgtaggact | cacacacgac | ttcaacggga | 360 |
| ttgtgaggat | caagtcactc | tcattgggaag | aatttttaca | tgggaaagcg | gataaaaactt | 420 |
| tcattggact | ggaatgtttg | gagaatatta | atttccaaat | caggaaaccac | aaactgccct | 480 |
| ctaataagac | atcggctatc | taagcgtgtg | gggtccccct | ttctgccagc | agttctggtt | 540 |
| cttaagaaaa | tcaccataaa | tcagacatga | aaattctggc | tccaaaaata | gcattttctt | 600 |
| tgtgcaaaaa | aaaacgtgtg | tatcaagtat | gatgttcccc | caacgtggac | acaccccggt | 660 |
| tcctnacaaa | gccaaagccc | ctgcagctgc | cacattcctg | ggcttactgt | gcacangtgc | 720 |
| tttttttaag | acaggatcaa | atnttaggac | ccngnanaan | gcaacacctg | gaga | 774 |

<210> 130
<211> 803
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(803)
<223> n = A,T,C or G

<400> 130
ggnnnnntnn anacgnatcn gacctganta cgccaacttg gtaccgagct cggatccact 60
agtaacggcc cgccagtgtg ctggaattcg cccttagcgt ggtcgcggcc cgaggtacct 120
tggaagtatt gtcattaata taggctgggt cgtcaaataa agcaaacct tgcaatatca 180
gctagattta cactccggga cgttgcccaa aggtaggaag aaagcagagg gaaatatttc 240
agtcattcatt tccaaagtca ttatcaaaat ctgtgaggaa gtttaattctt ccaaagagtc 300
aatgtcagac atcaggcctc tgttgccctgc ttctctcgag gcactagatt aggagtcttc 360
aataagagac ttaacatgag gtatatggaa gatgaggcac cgagataagt tcatcattag 420
gtgtgagcac tgctcaccct tgcggcaag ttctccttaa gggcctgaag cacaggtgtc 480
caaagaaaag cgtaagtcc atcttaatag aatctatgtg gtatatgatg tggtcagccc 540
ccggtctgtg atcagcaaga acctacagca cagattatgc cctgcccact tcaatgaata 600
cctactctcc tncattctcc atcacttttt ttgttatcaa gactccggac cttgcccattg 660
gagaagttaa gagaggaact cttgtggaga gctgggttat tttctgccct gtgcgacgag 720
tttcagcttg gccaaagaaa ggagtcaagg ttattaaaaa gcatacaat ggtagatctt 780
ccaggcttgg ntttttttgt ttt 803

<210> 131
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 131
antgggcctc tnnagcatgc tcgacggccg ccatgtgatg gatattctgca gaattcgccc 60
ttngcccgcct ttccagnccg gaaacctgtc ntgccagntg cattaatgaa tcngccaacg 120
cgcgngaga ggcggnntgc gtattgggag ctcttccgct tcctcgctca ctgactcgct 180
gcgctcgccc gttcngctgc ggcgagcggg atcagctcac tcaaaggcgg taatacngtt 240
atccacagat caggggatan cggcaggaaa gaacatgtga ncaaaaggcc agcaaaaggc 300
caggaaccga aaaaaggccg ctttgttggc gtntnaccat aggctcnncc cccttgacna 360
gcttcacaaa aatctacgct cagntcccag gtgcnaaatc ccganaggac tntaangatt 420
cnnggnnttt cccctgaan nctncctant gcgctctcct gtaccaacct tgccgtttac 480
cggataacctg nccgcctnna tnccttcgng aagcgtggct tttnaatngg ctacttttt 540
gggnatctaa aancggnnta ggcngnncgt tnnaaantng nntttttgcn caaacccct 600
gtttaaactn acctatgngc attatcccgg aaacttttgg tnttngaate caaccnggna 660
aanacacnan ttaatnngcc nttggcntga aaccacttg ggtnaaccat ggattttggc 720
ncnaccnagg gtnntttttn nggcnggtnc ntaccggag ttctttnaaa acnggggtggg 780
cncttanacc tatcnggnnt tcccccttan aaaaaaat 818

<210> 132
<211> 777
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(777)
<223> n = A,T,C or G

<400> 132

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|-----|
| acnntatgac | ntgantaccc | aacttggtac | cgactcggac | cactagtaac | ggccgccagt | 60 |
| gtgctggaat | tcgcccttcg | gcccggcccg | gcagggtacct | ggaaaataac | ttctttcttt | 120 |
| tcctctagat | tttcgaagaa | gcaaataaat | caagaataga | aacctatata | taggaggttg | 180 |
| ggcctcctgc | aaagaatgaa | gcactttttg | ttaaatacag | gagaggctac | ttggctgcac | 240 |
| taatattgtc | tttttggaa | cttatagagt | gtcaccaagt | tgaacttttg | aatggcttga | 300 |
| atcatccctg | gagcatctgt | gccgggcagt | caggagttag | tgcaccgcct | cccaccagc | 360 |
| ccatttgggc | ctcacaccct | cttcattcct | ttccccatga | ggcaggcaaa | cacggctcatg | 420 |
| accatttttg | ggttcacttc | aaccagggtct | tctggcaggg | catacactct | tgctccaatt | 480 |
| tttcggggcca | tagagatggc | atattttgca | ttgttgagtt | tctcatcatc | attcagattt | 540 |
| tctgtcttca | gaaggtcata | gttaatggaa | cctgggttga | tggcatcgat | gangtccaga | 600 |
| acaggcagac | ttgtacctcg | gccgcgacca | cgctaagggc | gaattctgca | gatatncatc | 660 |
| acactggcgg | gccgntcgag | catgcatcta | gangggccaa | ttcgccttat | agtgagtcgt | 720 |
| attacaattc | actgggccgt | cgttttacaa | cgctcgtgact | gggaaaacc | tgcgttn | 777 |

<210> 133

<211> 775

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(775)

<223> n = A,T,C or G

<400> 133

| | | | | | | |
|------------|------------|------------|-------------|-------------|------------|-----|
| ntgggcctct | nnagcatgct | cgacggccgc | catgtgatgg | atatctgcag | aattcgccct | 60 |
| tagcgtggtc | gcggccgagg | tacaagtctg | cctgttctgg | acctcatcga | tgccatccaa | 120 |
| ccaggttcca | ttactatga | ccttctgaag | acagaaaatc | tgaatgatga | tgagaaactc | 180 |
| aacaatgcaa | aatatgccat | ctctatggcc | cgaaaaattg | gagcaagagt | gtatgccctg | 240 |
| ccagaagacc | tggttgaagt | gaacccccaa | atggctcatga | ccgtgtttgc | ctgcctcatg | 300 |
| gggaaaggaa | tgaagagggt | gtgaggccca | atggggctgg | gtgggaggcg | gtgcactcac | 360 |
| tcctgactgc | ccggcacaga | tgtccagggt | atgattcaag | ccattccaaa | gttcaacttg | 420 |
| gtgacactct | ataagattcc | aaaaagcaca | tattagtga | gccaaagtagc | ctctcctgta | 480 |
| tttaacaaaa | agtgttcat | tctttgcagg | aggcccaacc | tnctatatat | aggtttctat | 540 |
| tcttgattta | tttgcttctt | cgaaaatcta | gaggaaaaga | aagaagttat | tttccaggta | 600 |
| cctgcccggg | cggccgaang | gcgaattcca | gcacactggc | ggccgttact | agtggatccg | 660 |
| agctcggtac | caagcttggc | gtaatcatgg | tcatagtctg | ttcctgtgtg | aaattgntat | 720 |
| ccggtcacaa | ttcccacaca | tacgaaccgg | gaagcataaa | gtgtaaagcc | tgggg | 775 |

<210> 134

<211> 772

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(772)

<223> n = A,T,C or G

<400> 134

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| acnnttgacc | tgatacccag | ctgggtccgac | tcggacccta | gtaacggccg | ccatgtgctg | 60 |
| gaattcgccc | ttgagcggcc | gccggggcag | gtctataagt | ctttaaattg | ggtcgtgttt | 120 |
| ttagcaggtg | agactaattt | atctcttctc | cagtgaattg | atgctggtgg | gattcgattt | 180 |
| cacatcacaa | cttatattga | tagggatttc | cttcccaaga | gtaataaatt | gtttggtttg | 240 |
| atataaactt | gggggcata | tcaatatcaa | ggtacttttt | tttttttttt | aagtttttagt | 300 |
| tcagaataac | attaattttg | agagattgag | gtaaagaacc | ttactaatg | ctaaggagtt | 360 |
| tattttgatt | aacatagggt | attctgacca | ccacctcttc | cttccttaat | ctccttagaa | 420 |
| tctgacagtc | tcaaagctgt | cacacaaatt | agactaattt | tgacactttg | aaatgaaaac | 480 |
| ttcaagggaag | aagtagccac | ggacagtatt | gtttataatc | agtaggtggc | actctttcct | 540 |
| caggtagccc | cccattttca | catgatgtgt | ttgaaggtta | aatgccccaa | aagtgtctgag | 600 |
| tcagctataa | aactaagtc | ctgaattcca | tggccctttt | aaatatgtaa | tcattcaaga | 660 |

ttgaaaaaaa aaattaagca ttttttgnnt gnttgcttgg ttggttttga gacngagttt 720
cactcttgnnt ggccaggctg gagtgcgaatg gcgccatctn actcactgna ag 772

<210> 135
<211> 784
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(784)
<223> n = A,T,C or G

<400> 135
ntgggctctt nnagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtgggtc gcggcccag gttacttcttt tgaataattc agtattttta aaatgcaagc 120
caggcacagt ggctcacgcc tgtaatccag cactttggaa ggccgagggtg gggggatcac 180
gaggtcagga gttcaagacc agcctggcca acatggtgaa acctcatctc tactaaaaat 240
acaaaaacta gctgggcatg gtggcgggca cctgtaacct cagctacttg gagggctgaa 300
ggagaattgc ttgaatccgg gaggcagagg ttgcagttag ctgagatggc gccattgcac 360
tccagcctgg ccaacaagag tgaactccg tctcaaaaac aaacaagcaa acaaacaaaa 420
aatgcttaat ttttttttcc aatcttgaat gattacatat ttaaaagggtc catggaattc 480
agggacttag ttttatagct gactcagcac ttttgggtggc atttaacctt caaacacatc 540
atgtgaaaaa gggggggtac ctgaggaaa agtgccacct actgattata aacataactg 600
tccgtggcta cttcttctt gaagttttca tttcaaatg tcaaaattag tctaatttgt 660
gtgacagctt tgagactgtc agattctaag gagattaaag gaanggaaga ggtggtgggtc 720
agaataacct atgttaatca aaaataaact tccttagcat taagttaang gtctttacct 780
caan 784

<210> 136
<211> 768
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(768)
<223> n = A,T,C or G

<400> 136
acnttgantg naccacttg tccgactcgg atccctagta acggcgcagt gtgctggaat 60
tcgccctttg agcggccgcc gggcagggtac tttttttttt ctttttttac atctgatttt 120
aatgcttcgt taacttcaa agggaactgg gtagagtcca gaagggtgagc tgttgttttt 180
ctaaacctct tcccaggaag gagacattga cacttgaatt tttgccacct ttttctctat 240
tagaaggaaa gtagaaagcc ttactgtagg atttttaaaa aaaaatccat ctcaccccat 300
attggtctta aataagtata gactaattaa cctaagctac ctttaacaac gtagaattta 360
gatgggttca tatatgtgag aaaaacctga atataggaca ggggtccctac ttttttcccc 420
acctctgccg cccaggctag agtatagtgg tgtgatcttg gccactgca acctctgctt 480
cctaggttca agtgattctc ctgcctcagc ctccaagta gctgggattg taagagtatg 540
ccaccacgcc cagctacttt ttgtattttt agtagagaca ggggttctac atgttggcca 600
ggatggtctc ttaactcctg ccctcaagt atccaccaga gaggagatcc tcggccttcc 660
caagtgtcgg gattataggc atgagccacc gtaccagacc tactttctaa ttaattaaaa 720
aaaaannnnn nnnnaaaaaa acttnccaaa tgactgataa aaaactgc 768

<210> 137
<211> 777
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(777)

. <223> n = A,T,C or G

```
<400> 137
ttgggcctct ngagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct    60
tagcgtggtc gcggccgagg taccatgctg acttcttggg atcttttaag gcctaatttt    120
cccttccttg agattactgt agtgtgttcc agctaatttc tatttggaag cgagttggaa    180
cagctgaaaa ctaggtatta ttgaaggcaa agtagcctca cgtcagtttt ttatcagctc    240
atttggaag tttttttttt tttttttttt ttttttaatt aattagaaag taggctgggt    300
acggtggctc atgcctataa tcccagcact tggggaggcc gaggatctcc tctctgggtg    360
atcacttgag ggcaggagtt aagagacccat cctggccaac atgatgaaac cctgtctcta    420
ctaaaaatac aaaaagtagc tgggcgtggg ggcatactct tacaatccca gctacttggg    480
aggctgaggg aggagaatca cttgaacctt ggaagcagag gttgcagtgg gccaagatca    540
caccactata ctctagcctg ggcggcagag gtggggaaaa aagtaggacc cctgtcctat    600
attcaggttt ttctcacata tatgaaccca tctaaattct acgttggtta aggtagctta    660
ngttaattag tctatactta tttaagacca atatgggggt agatggattt ttttttaaaa    720
atctacant aaggctttct acttttcctt taatgaggaa aaaagtggca aaaattt    777
```

<210> 138

<211> 950

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(950)

<223> n = A,T,C or G

```
<400> 138
nnnnnnnnnn nnnnnnnnnn nttnnnnnnn nnnnnaaanc cnnnnnttna nnnngnaaac    60
cccattgna aanttaaccn nccccaaaa gccctttnng ggtttaaccc ccgaaagcct    120
tccgggggna atccccaact ttaagttaaa acngggggcc cgggcccaag ttggttggcc    180
tttgggggaa aatttcgcgc ccctttccga agccggggcc ggccccgggg gccaaaggta    240
ccatgggaat ggttaccttt tggcaagaac tggtaaaacc ctggaaattt tggatatttt    300
gctttggaca ttggccctaa attaattaag tttcaagggt gtcaggcttt acccactttt    360
tggcttgga acatgcagaa gagacagtgc ccttttttag gtatcatatc aggaatcatc    420
tcacattggt ttgtgccatt actggtgcag tgactttcag ccacttgggt aagggtggagt    480
tggccatatg tctccactgc aaaattgctg attttccttt tgtaattaat aagtgtgtgt    540
gaagattctt tgagatgagg tatatatctc actcttcac aaactataag tttttttaag    600
taaaagaaaa tttattatga aactaaagga ataaaagaat gaccactcca taggcagaga    660
aacgtcactt taagggtttt acgtcaattg atttttgtcc aaatcaataa ttactgcaat    720
gattgaaaaa tgattattac taagtgtgtt ttcattgtct caaggctctg tgaactctgg    780
atccaggctg tgtcaacagg gtagtgtggt gcctcctgta cctcgccgcg gaccacgcta    840
agggcgaatt ctgcagatat ccatacact ggcggccggt cgagcatgca tctagagggc    900
ccaattcgcc tatagtgagt cgtattacaa ttcactggcc cgcgttttag    950
```

<210> 139

<211> 779

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(779)

<223> n = A,T,C or G

```
<400> 139
ttgggcccct agagctgctc gagcggccgc catgtgatgg atatctgcag aattcgccct    60
tagcgtggtc gcggccgagg tacaggaggc accacactac cctgttgaca cagcctggat    120
ccagagttca gcagaccttg agacaatgaa aacaaactta gtaataatca tttttcaatc    180
attgcagtaa ttattgattt ggacaaaaat caattgacgt caaaacctta aagtgacgtt    240
tctctgccta tggagtggtc attcttttat tcttttagtt tcataataaa ttttctttta    300
cttaaaaaaa cttatagttt gatgaagagt gagatatata cctcatctca aagaatcttc    360
```

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| acacacactt | attaattaca | aaaggaaaat | cagcaatttt | gcagtggaga | catatggcca | 420 |
| actccacctt | acccaagtgg | ctgaaagtca | ctgcaccagt | aatggcacaa | accaatgtga | 480 |
| gatgattcct | gatatgatac | actaaaaagg | gcactgtctc | ttctgcatgt | tgacagacaaa | 540 |
| aagtgggtaa | gctgacactg | aaactaataa | ttaggcaatg | tcaagcaaat | acaatttcag | 600 |
| gttgacagtc | tgcaaagtaa | catccatgta | cctgcccggg | cngnccgctc | gaaggcgcaa | 660 |
| ttccagcaca | ctggcggccg | ttactagtgg | atccgagctc | ggtaccaagc | ttggcgtaat | 720 |
| catgggcata | gctggttcct | gtgtgaaatt | ggtatncgct | cacaattncc | acaacatag | 779 |

<210> 140

<211> 779

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(779)

<223> n = A,T,C or G

<400> 140

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gcccntagag | catgctcgac | ggccgccagt | gtgatggata | tctgcagiat | tcgcccttag | 60 |
| cgtgggtcgc | gccgaggtac | caggtgggct | gacgcacatc | ccctaaacat | tctggatctc | 120 |
| ttactcatcg | tgaaaggcag | acgctctaag | tctaaagtct | agggtaggag | tttccattct | 180 |
| ttggaaaacc | aaagatgggt | actcttctta | atgaaactga | gaagaaggta | tctacagaaa | 240 |
| acactgaatt | taaacaaatt | atgaccttgt | ttgttgaagc | catcaaggac | ccaagatata | 300 |
| tcaaagaaca | acatctctgt | attggcctac | aggttcagag | tgttttgagg | tctgtttaag | 360 |
| cactaatagg | attttaggcc | agcatccagt | cagaagagat | agttcacaga | ctcagagttg | 420 |
| gaaacagatt | aaaaaaaaaa | agatgtcaac | atagaaaatg | atgatagagt | ttagttaaaa | 480 |
| aaattcacac | ataaaattac | agttaaaaaa | attcacacat | aaaatagagt | gtttgcatag | 540 |
| caagacatta | ttgcccttca | gcctggcaga | aaaacataaa | ctcaggtgta | tattttataa | 600 |
| taaacattgt | attgaatgct | aagaatgata | cactgttgaa | catctcctga | atggtttgcc | 660 |
| ttcttgtaaa | tcataccaat | tgtttagaca | attgaaattc | caagctcttt | ctcttctccc | 720 |
| atataaaaac | caacagaaac | anggaggctg | ttagtagcaa | gctcctcatg | ggaaanggt | 779 |

<210> 141

<211> 986

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(986)

<223> n = A,T,C or G

<400> 141

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|-----|
| aanccnnnnn | ntttatttgg | gnaaacccaa | ttgggnaaaa | ttnaaccn | ccccccnaaa | 60 |
| ngcccttttn | gggggttnaa | ccccccggaa | aaccctttcc | gggggggaaat | tcccaacct | 120 |
| ttaaagnttt | aaaaaccccg | gggccccggg | cccccaaa | gtgggttggc | cnttggggga | 180 |
| aaaatttttt | ccgggcccc | cnttttaaa | cccggttggg | gtttccggcc | ngggggcccc | 240 |
| gggaaagggt | tnaccctttt | ttttttaact | tttttnnnnt | tccttttttn | nttccctttt | 300 |
| tttctttttt | ttttcttttg | gtntnnnttt | ttttttcaat | tttttggttt | ttggtttttg | 360 |
| gttatggttt | ttttagaaca | gggggtccac | tctgtcacc | aggctggagt | gcagtgggtg | 420 |
| aatcacaggt | cactgaaacc | tcccacctag | ctgggactag | agggtgcagg | caccacacca | 480 |
| gctaatttat | gtaatttttg | tagagacgag | tttcaccacg | ttacctaggc | ttgtcttgaa | 540 |
| cacctgggct | caagcaatct | tccagcccca | gcctcccaaa | gtgctgggat | tacagggtata | 600 |
| aaccacaatg | ccccggtttt | tactctttac | tgcatccttc | ccatcagtat | taattcctca | 660 |
| gaaattttagt | acccctgtgc | ttcattcagt | atcagtaacc | ctgcaatgat | ttttacaaat | 720 |
| atctttttct | agtgggtttt | ttacttagag | gaaagaactt | tgtaatagct | cttaatgttt | 780 |
| atatataaga | gaagacagaa | tggaaaatgt | tttttgaa | caaatattgc | atgatgtaaa | 840 |
| gaaaaaactt | taaacttaaa | tgagtanggt | tgctctgaat | tacactggta | actctctact | 900 |
| tctttattaa | agaagttata | gtaagatgcc | tttggntacc | tgatttcagt | gtacctgccc | 960 |
| gggcccggcg | ntcaaaaggg | cgaant | | | | 986 |

<210> 142
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 142
gggcccggtan agcatgctcg agcgggcgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcggcc gcccgggcag gtacactgaa atcaggtaac aaaggcatct tactataact 120
tctttaataa agaagtagag agttaccagt gtaattcagg acaacctact catttaagtt 180
taaaagtttt tctttacatc atgcaatatt tgacttcaaa aaacattttc cattctgtct 240
tctcttatat ataaacatta agagctatta caaagttctt tcctctaagt aaaaaacca 300
ctagaaaaag atatttgtaa aaatcattgc agggttactg atactgaatg aagcacagg 360
gtactaaatt tctgaggaat taatactgat gggaaggatg cagtaaagag taaaaacggg 420
ggcatttgtg tttatactg taatcccagc actttgggag gctggggctg gaagattgct 480
tgagcccgag tgttcaagac aagcctaggt aacgtggtga aactcgtctc tacaaaaatt 540
cataaattag ctggtgtggt ggcctgcacc tctagtccca gctaggtggg aggtttcagt 600
gacctgtgat tgcaccactg cactccagcc tgggtgacag agtgggaccc tgtctaaaaa 660
aaacataaca naacanaach naatgaaaaa aaaaacaaga aaaaagaata gaaaaagaaa 720
aaagtnaaaa gtnccctcggc cgcgaccacg ctaagggcga attccagcac actgcggccn 780

<210> 143
<211> 794
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(794)
<223> n = A,T,C or G

<400> 143
nnnnnnnnnn nnnacnnttg actgataccc aacttggtac cgactcggac cactagtaac 60
ggccgcaggt gtgctggaat tcgccccttc gagcgccgc ccgggcaggt acagaaagaa 120
gagccaggat attctttgtt ttcctaagcg tagctgtgag caacattatc tctcctactg 180
gcttctttga ggtatgagag tcatcattac atctgtgtgc tttgtcaagt tatatgtcac 240
aattccacct gtgggtagag aacaagcaca agagtcacat caactgtgtg ctgggccagg 300
gttatgtcac aatcttccct gagagcatgc accaggcaga agagtcacat cacagggttc 360
tcaaccagag atgttacaat cctctcctga aagcaggaca caggaaaaag agtaagatca 420
cctgcatgct gggctcagat atatgtcaca agactcactg tgggcaaagt ccagaaggac 480
agacagaaca gctggttgct tgacccagca atatgtcaca atcttctcta tgggcagaat 540
gcaggcagaa gtagagggtc tcatcttcca ggtgatggat taaaaaata catcccaagg 600
ctctctgtgg gaaagggctc angcagaaac tttccaaccc ctangtgttt gcttcagtga 660
tatgtcacia ttaacaaaaa tatgcaggtt tcaagcaagt gagtnaagtc atatcaccta 720
nggtgcttgg tccanaaatc tgnacaaatc tttttttttt ttttggcatg cccagcngaa 780
ttgaaaagtc ncan 794

<210> 144
<211> 782
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(782)
<223> n = A,T,C or G

<400> 144

```

cnannngggcc cntagagcat gctcgacggc cgccagtgtg atggatatct gcagaattcg      60
cccttagcgt ggtcgcgggc gaggtacaat cttggctcac tgcaacctcc acctcccggg      120
ttcaagcaat tctcctggct cagcctcctg agtgctggga ctacaggcat gcaccaccac      180
tcccacctaa ttttgatttt ttgatataga cggggcttct ccatgttggg caggctgttc      240
tcaaactcct gacctcaggt gatttgactg tcttagcctc ccacagtgtg gagcttatag      300
gcagggtgcca cgacacctgg ctggaatcat ttatttcaac atatctctgg gtccaacaac      360
atgggtgatgc aactttcctg catggggcctt cccacagaaa tactctaata catcttttca      420
ttcattatct tgggtgatgtg acttttctat tctgcttggg cactgccaaa aaaaaaaaaa      480
aagattgtga cagattttctg gaccaagcac ctagggtgata tgactttact cacttgccctg      540
aaacctgcat attttggtta ttgtgacata tcaactgaagc aaacacctag gggttggaaa      600
gtttctgcct gagcccttcc acagagagcc ttgggatgta tttttttaat ccatcacctg      660
ggagatgaaa ccctctactt ttgcttgcct tctgcccata gagaagattg tgacatatgt      720
ctgggtcaag caaccagct ggtctgctgt ccttntggac tttgccaca agtgagtttt      780
gn

```

<210> 145

<211> 780

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(780)

<223> n = A,T,C or G

<400> 145

```

annnttgacc tgataccag cttggtaccg agctcggatc cactagtaac ggccgccagt      60
gtgctggaat tcgcccttcc gagcgccgc cggggcaggt acttttttta cttttttttt      120
cttttttttt ttggacatct gttttcactc ttaggctttt aaacaatagt tattgctttt      180
atccctctca gattctaata actgagagcg atggggctat attgaatctc tgtatgcact      240
gagaactgag ctatgaagag gatcttatta aactgctggt ctgactttat ggattgacac      300
tgttcctttc ttttattgtg aaaaaaaaaa aaaaccctga aagtcttggg aaccctctaa      360
agtccttttg gaatcctcaa aaagcatggg aagttaagta tttagctaca taaatgttgt      420
aagatcatac cttatgtata gaagtaataa gacctattgg aattactgga ctaattgaat      480
agttaagggt tctattcggg acaataaaat gtattttgaa agtgctgcta actattgatg      540
ctgacagtgt ttactccta tgagtgacct aaacatatta taaatatgtg gtaaaaggaa      600
tgagacctgt ggggttgagc agaatgttgg actttttttt tnnnnnnnnn ntttttngc      660
ttncattnng atngataacg atttcnggat tncctttaaa nncncngang gtttggaac      720
tttggaactg attctggttc ccngaaacag gttcactggg nncggggga cacttttaan      780

```

<210> 146

<211> 778

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(778)

<223> n = A,T,C or G

<400> 146

```

ttgggcccnt agagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct      60
tagcgtgggc gcggccgagg tacatggagg cctggactgt aaagagacta cggaaggggc      120
agcatgtgtg ttttgcttct cagattcatt gtcactcacg ttgcataaag tcctcagttg      180
tttttaagta attgttttac tatggatata ttaaacatac agaataaaaa agggaataaa      240
catacaattt ggcaaacccc ctactgagcc tttaaaaata ttagaagggt ggtattaaac      300
caggtaactt acggatttgg aaaaaaaaaa aaaaagaaag cattgaatat ggctgggcgg      360
ttctctgggg atccttgggc agaccagtt tgccccgatt tctcactgta gttttcaaga      420
ataactgtag gagggcgttg gagtgacgca tcctgagata agggagacga gccagaacag      480
cgcgggcact gttccagccc ccctagaaat ggggtgatct tcagtgtctc agctcagttg      540
gtcattgctt acccacgatg taaaagccta ggatcggagg cttccccagg gttcgtcagc      600
tgtggcacia tagggcccggt tgcaaataag attctattcc tgtcagacag tttcgtgagt      660

```

```

ttgtggggga acactcaccc tagcttctgn tgnctcttca tgcctgtgtg ttcctaataca 720
acttttttgn gtaacttggg gttttgaaag tgtcaccagc acacaatgga acctgtcn 778

```

<210> 147

<211> 784

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(784)

<223> n = A,T,C or G

<400> 147

```

acnntatgac ctgattacgc caacttggtg cgcactcgga ccaactagtaa cggccgcccag 60
tgtgctggaa ttcgcccttt cgagcggccg cccgggcagg tacttttttt tttttttttt 120
tttttttttg ggattgaatc aacatgcttt aataggaaaa gatgtatggg ctatatatgn 180
atcaat:ttg ngaancctcg ntctaataaa gggctctttt cttttctatg atacacacag 240
ncacgctgat aatatgcnaa tgaacatttt cttttatgnc tctncanata atgggtattg 300
gctgaggnaa attaaattcc caccangnt tgcctgncagt attttaacac ccacattagt 360
atatgcntnc agggtcataa ccccctaaaa tccatnatgc aaccttatta atctggcttg 420
ggantccngg ttaatgcttg gatttanttc ctgattacac tncntngaaa agtgagacat 480
ttgncattcc caactttggg aaaaccaact tatattcaac cntntnaatg aaggccatct 540
tgatggnttc aacactaatt tttatgatgc aaatttatac acngattttt gtaaagggca 600
aagtttttaa agcgtattta acttgatggg ttctatcagc attaatnaaa tggncatgaa 660
taggcattaa aaacagttgc cagtgatnat ctgcatgaaa ggaaaaagaa ccctgcaaat 720
ggctattgaa nttggaaata ttggntttga natgtaagaa aatntttaga aagctcncnc 784
tgng

```

<210> 148

<211> 775

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(775)

<223> n = A,T,C or G

<400> 148

```

ggggccntan agcatgctcg acggccgcca gtgtgatgga tatctgcaga attcgccctt 60
agcgtggctg cggccgaggt acaaagcact gtttaaaacc agtccaagat acttaatcca 120
aactgtatca tgattcttca ttagaaatct agacaccact catgggtggt tcttacactt 180
taaaaagttg aggcattttc agtgtgagca ttctgaatat ctcttacata tcaaaaacaa 240
tacttccaac tcaatagcca ttgacgggt tctttttcct tcatgcagat tatcactggc 300
aactgttttt aatgactatt catgaccatt ttatttatgc tgatagaaaa catcaagtta 360
aatacgcttt taaaactttg tcttttacia aaatcagtg ataaatttgc atcataaaaa 420
ttagtgttga gaccatcaag atggccttca tttatatggt tgtatattag ttggttttcc 480
cagagttggg aatggcagat gtctcacttt tctatgtagt gtaatcagga aataaatcca 540
agcactaaac aggaatccca agacagatta ataagggttg atgatggatt ttaggggggt 600
atgaccctgg acgcatatac taatgtgggt gttaaaatac tgacagcaag ccctgggtgg 660
aattaattta cctcagacaa taaacattat ctggagagac ataaaggaaa atgttcattt 720
gcatattatc agcgtggctg ggtgtatcat agaaaaagaa aaagaacctt tttan 775

```

<210> 149

<211> 783

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(783)

<223> n = A,T,C or G

<400> 149

| | | | | | | |
|------------|-------------|------------|------------|------------|-------------|-----|
| acnntatgac | ctgatacgcc | aagcttggtg | ccgagctcgg | atccactagt | aacggccgccc | 60 |
| agtgtgctgg | aattcgccct | tagcgtgggc | gcggccgagg | tacccgatta | aaccagagca | 120 |
| aaaactacct | tctgcaggtc | agggagctaa | tgacatggca | ttggccaaac | gttcccgcag | 180 |
| tcgaactgct | acagaatgtg | acgttcgtat | gagcaagtct | aagtcagaca | atcagatcag | 240 |
| tgacagagct | gctttggagg | ccaaagtga | ggatcttctc | acgctggcaa | aaaccaaaga | 300 |
| cgtagaaatt | ttacatttga | gaaatgaact | gcgagacatg | cgtgcccagc | tgggcattaa | 360 |
| tgaggatcat | tctgaggggtg | atgaaaaatc | tgagaaggaa | actattatgg | ctcaccagcc | 420 |
| gactgatgtg | gagtcacact | tattgcagtt | gcaggaacag | aatactgcca | tccgtgaaga | 480 |
| actcaaccag | ctgaaaaatg | aaaacagaat | gttaaaggac | aggttgaatg | cattgggctt | 540 |
| ttccctagag | cagagggttag | acaattctga | aaaactgttt | ggctatcagt | ccctgagccc | 600 |
| agaaatcacc | cctggtaacc | agagcgatgg | aggaggaact | ctgacttctt | cagtgggaang | 660 |
| ctctgcccct | ggctcantgg | gaggatctct | tgagtcagga | tgaaaataca | ctaattggacc | 720 |
| attagcacag | tacttcatgg | caatttagac | agtgagtgc | atgaggtcta | ccagcccctt | 780 |
| ann | | | | | | 783 |

<210> 150

<211> 771

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(771)

<223> n = A,T,C or G

<400> 150

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| gggcccctan | agcatgctcg | acggccgcca | tgtgatggat | atctgcagaa | ttcgcccttt | 60 |
| cgagcggccg | cccgggcagg | tactgtgttg | gttctcttcc | atctgggtga | tccgttcagt | 120 |
| caggcaagcc | acggacactt | cactggcatt | cccgtgctc | cccttccggg | agcgtcttat | 180 |
| gctggggatg | ccttccgact | ctgaggagga | tggtgcatcc | agcgcatcat | cgctcgatgt | 240 |
| gaggggctgg | tagacctcac | tgactcact | gtctaaattg | tccatggagt | tactgtgctg | 300 |
| atgggtccatt | agtgtatttt | catcctgact | caagagatcc | tccactgagc | caggggcaga | 360 |
| gccttccact | gaagaagtca | gagttcctcc | tccatcgctc | tggttaccag | gggtgatattc | 420 |
| tgggctcagg | gactgatagc | caaacagttt | ttcagaattg | tctaaccctc | gctctaggga | 480 |
| aaagcccaat | gcattcaacc | tgtcctttta | cattctgttt | tcatttttca | gctgggttag | 540 |
| ttcttcacgg | atggcagtat | tctgttccctg | caactgcaat | aaagtggact | ccacatcaag | 600 |
| tcggctgggtg | agccataata | gtttccttct | cagatttttc | atcaccctca | gaatgatcct | 660 |
| cattaatgcc | cagctgggca | cgcagtgtctc | gcagttcatt | tctcaaatgt | aaaattttcta | 720 |
| cgctcttgggt | ttttggcagc | gtgagaagat | ccttncttgg | nctcnaagcn | g | 771 |

<210> 151

<211> 778

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(778)

<223> n = A,T,C or G

<400> 151

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| acnntatgac | ctgatacgcc | agcttggtac | cgactcggat | ccactagtaa | cgggccgccag | 60 |
| tgtgctggaa | ttcgcccttt | gagcggccgc | ccgggcagg | actttttttt | ttcttttttt | 120 |
| acatctgatt | ttaatgcttc | gttaacttca | aaaggaactg | gtagagtcca | gaaggtgagc | 180 |
| tggtgttttt | ctaaacctct | tcccagggaag | gagacattga | cacttgaatt | tttgccacct | 240 |
| ttttcctcat | tagaaggaaa | gtagaagacc | ttactgtagg | atttttaaaa | aaaaatccat | 300 |
| ctcaccctcat | attggtctta | aataagtata | gactaattaa | cctaagctac | ctttaacaac | 360 |
| gtagaattta | gatgggttca | tatatgtgag | aaaaacctga | atataggaca | ggggtcctac | 420 |
| ttttttcccc | acctctgccg | cccaggctag | agtatagtgg | tgtgatcttg | gcccactgca | 480 |

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| acctctgctt | cctaggttca | agtgattctc | ctgcctcage | ctcccaagta | gctgggattg | 540 |
| taagagtatg | ccaccacgcc | cagctacttt | ttgtatTTTT | agtagagaca | gggtttcatc | 600 |
| atgttgGCCA | ggatggtctc | ttaaactcctg | ccctcaaagt | gatccaccag | agaggagatc | 660 |
| ctcggcctnc | ccaagtgcTg | ggatttatagg | catgagccac | cgtaccCagc | ctactttcta | 720 |
| attaattaaa | aaaaaannnn | nnnnaaaaaa | aacttnccaa | atgagctgat | aaaaacng | 778 |

<210> 152

<211> 772

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(772)

<223> n = A,T,C or G

<400> 152

| | | | | | | |
|-------------|-------------|------------|-------------|------------|------------|-----|
| gggcccntag | agctgctcga | cggccgccat | gtgatggata | tctgcagaat | tcgcccttag | 60 |
| cgtggctcgcg | gccgaggT.ac | catgctgact | tcttggtatc | ttttaaggcc | taattttccc | 120 |
| ttccttgaga | ttactgtagt | gtgttcCagc | taatttctat | ttggaaacga | gttggaacag | 180 |
| ctgaaaacta | ggtattattg | aaggcaaagt | agcctcacgt | cagtttttta | tcagctcatt | 240 |
| tgggaagttt | tttttttttt | tttttttttt | tttaattaat | tagaaagtag | gctgggtacg | 300 |
| gtggctcatg | cctataatcc | cagcacttgg | ggaggccogag | gatctcctct | ctggtggatc | 360 |
| acttgagggc | aggagttaag | agaccatcct | ggccaacatg | atgaaaccct | gtctctacta | 420 |
| aaaatacaaa | aagtagctgg | gcgtggTggc | atactcttac | aatccCagct | acttgggagg | 480 |
| ctgaggcagg | agaatcactt | gaacctagga | agcagagggt | gcagtgggcc | aagatcacac | 540 |
| cactatactc | tagcctgggc | ggcagagggt | gggaaaaaag | taggaccCct | gtcctatatt | 600 |
| caggtttttc | tcacatatat | gaaccatct | aaattctacg | ttgttaaagg | tagcttaagt | 660 |
| taattagtct | atacttattt | aagaccaata | tggggTgaga | tggatttttt | tttaaaaaat | 720 |
| cctacagtaa | ggnTTtctac | tttccttcta | atgaggaaaa | angnggcaaa | at | 772 |

<210> 153

<211> 780

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(780)

<223> n = A,T,C or G

<400> 153

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| acnntatgac | ntgaatacgn | ccaagcttgg | taccgagctc | ggatccacta | gtaacggccg | 60 |
| ccagtgtgct | ggaattcgcc | cttagcgtgg | tcgcggccga | ggtacttttt | tttttttttt | 120 |
| tttttttttt | tttagttaa | gaatgcttta | ttaatacaaa | tacacacaaa | ctctgaagca | 180 |
| ctaagaaatt | taaatactta | tgTcacagca | aacaggTggc | aattcaacat | ccagggtcga | 240 |
| cagaatgctt | gaaggagact | gcaacagatt | ggattcccat | ggtggagagg | gcatnttcac | 300 |
| aggTgaaggg | gggccagct | gaaacagctt | ttcaagctct | ctctcctcgt | caaggatcat | 360 |
| gagaggcact | ccactcaagg | ggaggTgcgc | aatctggTgc | tcttcaggca | ggtcaaaact | 420 |
| ctcaaagtct | agaggattga | agggaaagaa | tttttctatt | tctggatagg | catcatctga | 480 |
| ggcaggaaca | gagctttttg | ctttaacagt | cttctcagtc | atctttttgg | cagaaaagct | 540 |
| tggctgtttt | tgTTtgaggg | gtcccttggt | ctttacagac | ttttctgtag | ctctgttgac | 600 |
| agTtcccaaa | gcctttctag | tagcttttagg | taaggctggT | ggggcatcga | acgttttgcc | 660 |
| aaaacgtggT | gTTgaaactt | gagatctccc | atctaangct | ttgattgaan | gtccagaccc | 720 |
| cagcttcagc | ccatccttag | caaccacacn | ggtgcctggg | tctncatttt | ccttatnang | 780 |

<210> 154

<211> 770

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(770)
<223> n = A,T,C or G

<400> 154

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| gncctgttnna | gctgctcgag | cggccgccat | gtgatggata | tctgcagaat | tcgccctttc | 60 |
| gagcggccgc | ccgggcaggt | acgcggggac | cgcggcctca | gatgaatgcg | gctgttaaga | 120 |
| cctgcaataa | tccagaatgg | ctactctgat | ctatgttgat | aaggaaaatg | gagaaccagg | 180 |
| cacccgtgtg | gttgctaagg | atgggctgaa | gctggggctc | ggaccttcaa | tcaaagcctt | 240 |
| agatgggaga | tctcaagttt | caacaccacg | ttttggcaaa | acgttcgatg | ccccaccagc | 300 |
| cttacctaaa | gctactagaa | aggctttggg | aactgtcaac | agagctacag | aaaagtctgt | 360 |
| aaagaccaag | ggaccctca | aacaaaaaca | gccaaagctt | tctgccaaaa | agatgactga | 420 |
| gaagactgtt | aaagcaaaaa | gctctgttcc | tgcctcagat | gatgcctatc | cagaaataga | 480 |
| aaaattcttt | cccttcaatc | ctctagactt | tgagagtttt | gacctgcctg | aagagcacca | 540 |
| gattgcgcac | ctccccctga | gtggagtgcc | tctcatgatc | cttgacgagg | agagagagct | 600 |
| tgaaaagctg | tttcagctgg | gcccccttc | acctgtgaag | atgccctctt | caccatggga | 660 |
| atccaatctg | gtgcagtctc | ttcaagcatt | ctgtcgaccc | tgatgttga | attgccacct | 720 |
| gtttctgtg | acatagatat | ttaaatttct | tagtgcttca | gagtttgnng | | 770 |

<210> 155
<211> 767
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(767)
<223> n = A,T,C or G

<400> 155

| | | | | | | |
|------------|------------|-------------|------------|-------------|-------------|-----|
| acattatgac | tgatacgcca | gcttggtacc | gactcggatc | cactagtaac | ggccgccagt | 60 |
| gtgctggaat | tcgcccttag | cgtggtcgcg | gccgaggtag | gcggggcccgc | tgataactg | 120 |
| ccctgggaca | cagcagcggg | aagccgcctg | cagactgaac | ctcactgacc | caggtggaaa | 180 |
| tcgttaggtc | atttactgct | aagcagccag | atgaactctc | cctgcagggtg | gctgacgtcg | 240 |
| tcctcatcta | tcaacgtgtc | agcgatggct | ggtatgaggg | ggaacgacta | cgagatggag | 300 |
| aaagaggctg | gtttcctatg | gaatgtgcc | aggagataac | atgtcaagct | acaattgata | 360 |
| agaatgtgga | gagaatggga | cgcttgctag | gactggagac | caacgtgtag | tctctcagat | 420 |
| ggctctttgt | tactgcaaga | tttgacacgac | acttaccggg | ctggttggtt | ctgggctagt | 480 |
| tttattgnta | attttgtcac | agcctattta | attaaaagaa | cgaaaacact | tgctttaaag | 540 |
| cttgccagg | tgctctgctc | tctcatgaga | agagcttgga | tacagtga | ttgcacagct | 600 |
| cagtttttac | ctaaccacac | acttgacgac | ctnctgaggt | acctgcccgg | gcggccgctc | 660 |
| gaaanggcga | attctgcaga | tatccatcac | acttggcggg | cgctcgaaca | tgcattctaga | 720 |
| nggcccaatt | cgnccatag | tgagtcgtat | tacaattcac | tggnccgc | | 767 |

<210> 156
<211> 827
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(827)
<223> n = A,T,C or G

<400> 156

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| attgggcccc | tagatgcatg | ctcgacggcc | gccagtgtga | tgatattctg | cagaattcgc | 60 |
| cctttcgagc | ggccgcccgg | gcaggtacct | caggaggctc | gcaagtgtgt | ggttaggtaa | 120 |
| aaactgagct | gtgcaaaatc | actgtatcca | agctcttctc | atgagagagc | agaacaacct | 180 |
| ggcaagctta | aaggcaagtg | ttttcgttct | tttaattaaa | taggctgtga | caaaattaac | 240 |
| aataaaaacta | gccagaacc | aaccagcccc | gtaagtgtcg | tgcaaatctt | gcagtaacaa | 300 |
| aagaccatct | gagagactac | acgttggctc | ccagtcctag | caagcgctcc | attctctcca | 360 |
| cattcttatc | aattgtagct | tgacatgtta | tctccttggc | acattccata | ggaaaccagc | 420 |

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| ctctttctcc | atctcgtagt | cgttccccct | cataccagcc | attggctgac | acnttgattg | 480 |
| gatgaagggc | ancttanncc | nactngcagg | gagaagtcaa | tttgnttgnt | taaccnntna | 540 |
| atggancctt | accnanttnc | acctgggggtc | aagtgagggg | tcaagtctgc | angcggcttc | 600 |
| ccgctgctgt | gggtcccaagg | gcaagttatn | cagcggggcc | cgcgttacct | tgggccgggg | 660 |
| accaacgcct | taangggccg | aaatttccaa | gcacacttgg | ccggcccgtt | acctagtggg | 720 |
| atnccgaact | tcgggtaccc | aaagccttgg | gcgttaatca | atgggtcaat | aggcttggtt | 780 |
| tcctggtgtg | naaaattggt | aatccggttc | acaanttccc | cacaaca | | 827 |

<210> 157

<211> 818

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(818)

<223> n = A,T,C or G

<400> 157

| | | | | | | |
|------------|-------------|-------------|------------|------------|-------------|-----|
| aacactatga | cctgatacgc | cancttggtg | ccgnctcgga | tccctagtaa | cggccgccag | 60 |
| tgtgctggaa | ttcgcccttt | cgagcggccg | ccgggcaggt | acataatctg | gaaatttatg | 120 |
| ttacaggtat | gcatatttgt | atatgaaaaa | tattaactga | gaaattactg | agcttccttag | 180 |
| caaaaaatat | aattattttca | gagatatgat | acagtttaat | atctgccttc | ctcaaaaagt | 240 |
| cagaaaaata | aaagtttttaa | attgcatata | ttttcatttc | ttacatatgt | cagaacactc | 300 |
| agaattttta | ataaaatggt | ttaaaacata | attataagtt | gttactttta | tttctatggt | 360 |
| tagtggaacc | cacagggtcc | tgtatctgat | taaatggagg | atatattagg | agaatttttt | 420 |
| agaagaatga | cacatgtgac | ataccaccat | atttgcaaga | aaatataact | tgatagtaga | 480 |
| gtaagtttag | tgcttttatat | gatgaattaa | aggcactagc | tcttagaaaa | aaaaggatta | 540 |
| aaatgctgac | ttcagtaata | atgtaaggag | ctctgctctt | taacatttcc | taattaggta | 600 |
| taaactatga | tggaagggaa | agggtggaatg | gaagtntcta | cntnttacca | ttggctttcn | 660 |
| ttcatgaaat | tggcaggnag | cctnccattt | cnnnaggnt | ttaatnaaaa | antttttccc | 720 |
| aacttttntc | tttcnaaaaa | nttnttnncc | nnatngnnaa | ctggnggtna | aaacccggct | 780 |
| tttttggggg | gaaancctac | ctggntnggg | naaaaant | | | 818 |

<210> 158

<211> 772

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(772)

<223> n = A,T,C or G

<400> 158

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ntggggccnt | nnagcatgct | cgacggccgc | cagtgtgatg | gatatctgca | gaattcgccc | 60 |
| ttagcgtggt | cgcggccgag | gtacttcaac | cacccctcct | acaaaactct | atacccttgt | 120 |
| catattaaaa | ttgtatgtta | tgccaggctt | ccctaataca | acaaaatctc | tgaataaaac | 180 |
| ctattaaata | tacaatttct | atcaacatgc | ctgccacaca | tgcttaataa | ttgcttagtg | 240 |
| aatacaagat | taatgcata | gtgcctaagt | tacttcactc | agtataacaa | atgacaatat | 300 |
| ctcatttgtt | ttccgaagta | tccttattcc | attcaagctc | tgaagaaagt | attaatgata | 360 |
| ttcgctccta | agtaattttt | tctgcattca | aatctcacca | ttcaaagtat | ttccaacag | 420 |
| tagtttcccc | aaaagcagtt | tacacagtta | catttggtat | aatttttgaa | agaaaagtgt | 480 |
| ggaaaatttt | attaagactc | tgaatgtagc | ttactgccaa | ttcatgaaga | aagcaatgta | 540 |
| atacgtagat | acttcattcc | acctttccct | tcatcatagt | ttataactaa | ttaggaaatg | 600 |
| ttaaagagca | gagctcctta | cattattact | gaagtcagca | tttatacttt | tttttctaag | 660 |
| agctagtgcc | tttaattcat | catataaagc | agctaactta | ctctactatc | aagttatatt | 720 |
| ttcttgcaaa | tatggtggta | tgtcacatgt | gtcattcttc | taaaaaattc | tg | 772 |

<210> 159

<211> 1024

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(1024)

<223> n = A,T,C or G

<400> 159

```
ttgggnaaaa ttttaaaccg gcccccccaa angncccttt ttgggggntt aaaccccccg      60
gnaangcccc tttccggggg gggaaattcc ccccaaccct ttaaaggttt aaaaaccccg      120
gggcnccccg gccccccaaa gggttggtt ttggcccttt ggggggaaaa aattttttcc      180
gggccccccc ntttttaaag gccgggttgg ggggtttccc gggcccgggg gccccccgga      240
aaagggggtt aaccccttn aatttttttn gggtttttcc cccccaatn gggtttccaa      300
tttttttttt tttaaaaaac ccaaaaanggg aaaaaaaggg gttggcccaa aatttaaggg      360
cctttctttc aaaagggttt cctttgggaa aaaaaaacct tgggttgggg gaaaagggtt      420
nccccaaaat ttaaaccctg gaaaaccctt tttgggnaac ccactttaaa aatttaaaant      480
taaaantaaa tttaaattta aanttaagga atgggnttgg aaaaaaaaaa gaattatccn      540
ttaatttggc cttaattttt taatttgntn atttgactgg tnatgnnttt acttttnaaa      600
aacnctnctn ccaaaaacca attttactng gncnngtggg atttaccntn ttcnattacc      660
ngggagttaa cccaactnga acntttngga gggnccagtc ctccataggg acctccntca      720
ntntgatnc caactgcaag ttcagggaaa ttctcacatc ccccttgggc natatatctc      780
tttaaaagcn cctcacagca ctactgaan tctattatat tatagatang gtnattatg      840
ggaaaanggt nacanntcaa natnncccaa cgcggggana cacannngnc agngcccgat      900
gatnttccna nacacagant ttggtgttct ctggagncgt ttccccnta gnaaaatgtt      960
gacanttga cagagttttt acccccaggg gaacgtnaat caatctttgg aagtttcaaa      1020
tcag                                         1024
```

<210> 160

<211> 771

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(771)

<223> n = A,T,C or G

<400> 160

```
gggcctctnn agcatgctcg agcgccgcc agtgtgatgg atatctgcag aattcgccct      60
ttcgagcggc cgcccgggca ggtactgtaa gttattttct tccttatctc ccaatgacac      120
tgttttctac atgaaaaata ccattttggc tttatcaaca tgttattaat tcataatatg      180
agagatctat cagcactatt tgtaaaaata ttcaattaaa aaaattaaga tgatttatag      240
ttgtgtggta aagaatttga ccttacccaa aggaggtcag gcttttggcc tcagccttaa      300
ggagataatc ttgtcatacc caataaaagt gttattttta agtgaggctg actacacctg      360
ataatccagc ttgagggaca gttatgccag ttgaccaac tagatgattt agggagcttt      420
ctctcccaac ttcaaagctg tgatgaatca aacaggtaat taatcgatca tgcttatgta      480
atgaagcctt gattgaaact tcaaagattg attgacgttc cttggttggg aatactctgt      540
catgtgtcaa ttctagaagg gtaatacgtc ctgaggataa cagaagctct gtggttgga      600
tcacctctga ctctgcactt tgnntctcct gctttggctg attttgatct gtaaccttta      660
cctataataa accataacta taatataata gatttcagtg agtgctgtga ngctttctag      720
tgattttatt aacctaaggg tggatgtgag aatttntctg acttgagtt g          771
```

<210> 161

<211> 771

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(771)

<223> n = A,T,C or G

```

<400> 161
acncttgacc tgatcgccag cttgggtaccg actcggaccc tagtaacggc cgccagtggtg      60
ctggaattcg cccttagcgt ggctcgcgcc cgaggtagac aatttattat gaaatagctt      120
aatggcaagt ggtaatttag aagaatttag ttatcagata ggagatatat taaaatattt      180
aaaaattgga tatattcttg aagccctttt acacaagtaa tttctataat ttgattgtaa      240
tgaaagtata atataccttg ttactattat cagattaatt tttgaaagta gaattcctta      300
atcaagccaa ggttatgctg ctttataaga aattaatcag gtagtttaac actagagctc      360
attagccaac ctgtatgtag cacaaaataa tcactctctga taaataccta taaatatatt      420
ttattcatac ttttaaatat tttaacaattc aaataaaaac cttatatgta gacaatctgg      480
gctaaatttc catgtatgtt ttgaaaaata atgttagcat gaatagattc atatttaaat      540
atgattttta atactcttaa tagaggagac ataagaaata tttacataaa agctaagtag      600
catgatacag ctcatgggta ttttcctcat aggaaaacaa ttacttgatt tttttttgca      660
taggattaaa gactgagtat cttttctaca ttcttttaac tttctaangg gcacttctca      720
aaacacagac caggtagtaa atctncaactg ntctaagggtc tcacccact t      771

```

<210> 162

<211> 768

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(768)

<223> n = A,T,C or G

```

<400> 162
gggccctnn agctgctcgn cggccgccag tgtgatggat atctgcagaa ttcgccctta      60
gcggccgccc gggcaggtac tacaaaaaca gaataatttt gaagtttttag aataaatgta      120
atatatttac tataattcta aatgttttaa tgcttttcta aaaatgcaaa actatgatgt      180
ttagttgctt tattttacct ctatgtgatt atttttctta attgttattt tttataatca      240
ttatttttct gaaccattct tctggcctca gaagtaggac tgaattctac tattgctagg      300
tgtgagaaag tgggtggtgag aaccttagag cagtggagat ttactacctg gtctgtgttt      360
tgagaaagtgc cccttagaaa gttaaaaagaa tgtagaaaag atactcagtc ttaatcctat      420
gcaaaaaaaaa atcaagtaat tgttttccta tgaggaaaat aaccatgagc tgtatcatgc      480
tacttagctt ttatgtaaat atttcttatg tctcctctat taagagtatt taaaatcata      540
tttaaatatg aatctattca tgctaacatt atttttcaaa acatacatgg aaatttagcc      600
cagattgtct acatataagg tttttatttg aattgtaaaa tatttaaaag tatgaataaa      660
atatatttat aggtatttat cagagatgat tattttgtgc tacatacagg ttgggctaata      720
gagctctagt ggtaaaactac ctgataaatt cttataaagc agcatacc      768

```

<210> 163

<211> 776

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(776)

<223> n = A,T,C or G

```

<400> 163
nantatgacc tgatacgcca acttgggtacc gactcggatc cactagtaac ggccgccagt      60
gtgctggaat tcgcccttag cgtgggtcgcg gccgaggtac tcttcgcgag aggggaaggct      120
gtagaagtct ttgcaagctt catacagaga aatacaaaaag gtgtgatgcc attaaactgg      180
cctttctaaa gcattaggaa tttagtgaag ctctcaaaaca caaaactgaa aagccatttg      240
aacaaatctc atatacttgt agataagctt ttttttattt aaagcataca aattcaaatc      300
tttcaagcag aaaattcagt caagtgagat ccattgggtgg tttgagttca aagttagtga      360
gcaaatggaa atcattgcgg catctctctc atttccttag tggacattag accactcaaa      420
atgtgtcaca taatttacag ccccttggtg gtaattgaat atacacgttg agagtgcact      480
ggcagaacac ttaagaaaga ttgaatgcag gaggaccagc ttacgttatt tttggctcta      540
ctctgggttt tgcttttaaa gttttttctt gagattaatt tcaattgggt tgttccatcc      600
tattcaaaca aatgctttga gagaagagat gaacagcagc atcaataaaa attgtgatat      660

```

ttagtttnag agacatcang tgttgtaatc aaataagaca gaanggccaa gttaaaatct 720
gtgatngca taaatgaatt taactgtag aatagcanaa ttgagaggtg gattan 776

<210> 164
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 164
cgggcctcta gatgctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcgccg cccgggcagg tacacagtgg ataccacata ctgcctctga ggaagaagga 120
ggaggagaaa gaggagaagg aaggaaatct tcaaatgaca atttctatca ggactcattt 180
tcctattata agttcagaat acttgacgt cttataaaaa tcaagttaa atctctacta 240
ttttgatctg tttctctta aatattaaag gttataccta gggagattcc atgttgactg 300
gcaacaaaag cataccatct taagaataac tcttcataaa atatgtgtct aagaattaaa 360
agtgtctagt aacagataca caaaagagag atttagaata attaatattt aaagacagat 420
aattttaatg tttcacactt ttaactacaa aattctttgt tttcctaaat attagcaaaa 480
atgttatata ttaaaaataa tcttgaaaat ctacacctac atttagataa tagttcaaaa 540
gtcatattgc taatctacct ctcaattctg ctattcttac agcttaaatt catctatggc 600
aaatcacaga ttttactttg tcttctctgc ttatttgatt acaacacctg atgtctctga 660
aactaaatat ccaattttatt tgatgctgct gttcatctct tctctcaaag cattngtttg 720
aatangatgg aacaacccaa ttgaaattaa tctcaaggaa aaacattaaa ant 776

<210> 165
<211> 783
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(783)
<223> n = A,T,C or G

<400> 165
tnnnnnacac tatgacctga ttacgccanc ttggtaccga ctccgatcca ctagtaacgg 60
ccgccagtgt gctggaatcc gcccttagcg tggctgcggc cgaggtacag taggaaaata 120
agaataacaa cgggcaaaat ctttttagaa catctatgct ttatctgttt tagcttctaa 180
aacaatcctg aaggatgaat aattatcatg agtatagcag aatttaattt tccctgttgc 240
tccaaaatct taatgaaaac tttacggttg agagaaatag gtaaaataaa aaacttctta 300
aaattctaaa gacaattggt gaataaaatt taagtgaatg agtttgtgct tcatatttaa 360
cttttaactt tccaataggc tttattaaat ggaaaactga aatttcaaaa gtcttagagt 420
agaagcatct ttatcctggc tagggattct ctaagagaac cagtagcacc aagatgcact 480
ggaacagctg aacgagagag ttcatgcctt agggtttaga agcatacaag caaagggaat 540
ggtgcccact tcttactaga aaaatttcac aggctggagt ctgggcggag gagcctggga 600
tgacagtaga agtgtgcagg aagcactaag tctagcctgt acctgccggc gcggccgctc 660
gaaaggcgaa ttctgcagat atncatcaca ctggccggcc gntcgagcat gcatntagag 720
ggcccaattc gcctatagtg ancgatttac aattcactgg ccgcgtttta caacgtnnng 780
cnn 783

<210> 166
<211> 775
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(775)

<223> n = A,T,C or G

<400> 166

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|-----|
| attgggacctc | tnnagcatgc | tcgagcgccc | gccagtgtga | tggatatctg | cagaattcgc | 60 |
| ccttcgagcg | gccgcccggg | caggtacagg | ctagacttag | tgcttcctgc | acacttctac | 120 |
| tgatcatccca | ggctcctccg | cccagactcc | agcctgtgaa | atttttctag | taagaagtgg | 180 |
| gcaccattcc | ctttgcttgt | atgcttctaa | accctaaggc | atgaactctc | tcgttgactc | 240 |
| gttccagtg | atcttggtgc | tactggttct | cttagagaat | ccctagccag | gataaaaatg | 300 |
| ctttctactct | aagactttgt | aaatttcagt | tttccattta | ataaagccta | ttggaaaagt | 360 |
| aaaagttaaa | tatgaagcac | aaactcattc | acttaaattt | tattcaacaa | ttgtcttttag | 420 |
| aatttttagga | agttttttta | tttacctatt | tctctcaacc | gtaaagtgtt | cattaaaatt | 480 |
| ttggagcaac | agggaaaatt | aaattctgct | atactcatga | taattattca | tccttcagga | 540 |
| ttgttttaga | agctaaaaca | gataaagcat | aaatgttcta | aaaagatttt | gcccgttgtt | 600 |
| attcttattt | tcctactgna | cctcgggcgc | gaccacgcta | agggcggaatt | ccagcacact | 660 |
| ggcgggcgtt | actagtggat | ccgagctcgg | taccaanctt | ggcgtaatca | tggtcatagc | 720 |
| tggttctctgt | gtgaaantgt | atccgntcac | aattcacaca | acatacganc | cggag | 775 |

<210> 167

<211> 797

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(797)

<223> n = A,T,C or G

<400> 167

| | | | | | | |
|-------------|------------|------------|-------------|-------------|------------|-----|
| ttgnaacnat | tntgacctga | ttacgccaac | ttggtaccga | gctcggatcc | actagtaacg | 60 |
| gccgccagtg | tgctggaatt | cgcccttagc | gtgggtcgcg | ccgaggtact | ttcagaaggt | 120 |
| aaatcagtag | atcacccatg | tgtatctgca | ccttctcaac | tgagagaaga | accacagttg | 180 |
| aaacctgctt | ttatcathtt | caagatgggt | atttgtagaa | ggcgagggaac | caattatgct | 240 |
| tgtattcata | agtattactc | taaatgtttt | gtttttgtaa | ttctgactaa | gaccttttaa | 300 |
| ccatgggttag | ttgctagtac | ccttccttgt | ccgaaggagc | tgaccagtat | tgatgagaga | 360 |
| gtccaggcag | ctcctgaagt | tcagctggta | gtttgttctc | tgaacatttg | gtctcttgaa | 420 |
| ggcacagtat | atctggggct | tcttccttta | cccaatctaa | tcctttcttc | ttaatccagg | 480 |
| ctcgaagccc | atncacattc | caagagcaga | tcttgagtgt | ggcaggtttg | ccactgggtg | 540 |
| aggttttctg | atctgggggg | tcctcataca | gggctggggc | cctntcctgc | tgectctttg | 600 |
| tcattttctt | tgcgggccgt | cttactcttc | ttggcctctg | gcttctgtcc | tgagctcatc | 660 |
| cccgtctttc | ggccaccngt | tccccttttt | tacacgcctt | cggcatttcc | cgttaccgaa | 720 |
| cgcccttttg | gcagctgtac | ctgccccngg | cgggccgttcg | aaaaggccna | attcttgacg | 780 |
| aatttccatc | ncaccnn | | | | | 797 |

<210> 168

<211> 780

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(780)

<223> n = A,T,C or G

<400> 168

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|-----|
| acantatgac | ctgatacgcc | aacttggtac | cgactcggat | ccactagtaa | cggccgccag | 60 |
| tgtgctggaa | ttcgccctta | gcgtggctcg | ggccgaggta | ctccggctcg | tgctcagcagc | 120 |
| acgcggcatt | gaacattgca | atgtggagcc | caaaccacag | aaaatggggg | gaaattggcc | 180 |
| aactttctat | taacttatgt | tggaattttt | gccaccaaca | gtaagctggc | ccttctaata | 240 |
| aaagaaaatt | gaaaggtttc | tcactaaaacg | gaattaagta | gtggagtcaa | gagactccca | 300 |
| ggcctcagcg | tacctgccg | ggcgggccgt | cgaaagggcg | aattctgcag | atatccatca | 360 |
| cactggcggc | cgctcgagca | tgcatctaga | gggcccattt | cgccctatag | tgagtcgtat | 420 |
| tacaattcac | tgcccgctcg | tttacaacgt | cgtgactggg | aaaaccctgg | cgttacccaa | 480 |

| | | | | | | |
|------------|------------|-------------|-------------|-------------|-------------|-----|
| cttaatcgcc | ttgcagcaca | tcccccttcc | gccagctggc | gtaatagcga | agaggccccgc | 540 |
| accgatcgcc | cttcccaaca | gttgccgcagc | ctgaatggcg | aatggacgcg | ccctgtaacg | 600 |
| gcgcattaag | cgcgccgggt | gtgggtggta | cgcgccagcgt | gaccgcgtaca | cttgccagcg | 660 |
| ccctancgcc | cgctncttcc | gctttcttcc | ctttctttct | tngcacgttc | gccggctttt | 720 |
| cccgtcaagc | tctaaatcgg | gggctccttt | tanggttccg | atttantgct | ttacngnacn | 780 |

<210> 169

<211> 771

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(771)

<223> n = A,T,C or G

<400> 169

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|-----|
| gggccnctng | agcatgctcg | acggccgcga | tgtgatggat | atctgcagaa | ttcgcccttt | 60 |
| cgagcggccg | cccgggcagg | tacgctgagg | cctgggagtc | tcttgactcc | actacttaat | 120 |
| tccgtttagt | gagaaacctt | tcaattttct | tttattagaa | gggccagctt | actggtgggtg | 180 |
| gcaaaattgc | caacataagt | taatagaaag | ttggccaatt | tcacccattt | ttctgtgggt | 240 |
| tgggctccac | attgcaatgt | tcaatgccgc | gtgctgctga | caccgaccgg | agtacctcgg | 300 |
| ccgcgaccac | gctaaggggc | aattccagca | cactggcggc | cgttactagt | ggatccgagc | 360 |
| tcgggtacaa | gcttggcgta | atcatgggtc | tagctgtttc | ctgtgtgaaa | ttgttatccg | 420 |
| ctcacaattc | cacacaacat | acgagccgga | agcataaagt | gtaaaagcctg | gggtgcctaa | 480 |
| tgagtgcgct | aactcacatt | aattgcgttg | cgctcactgc | ccgctttcca | gtcgggaaac | 540 |
| ctgtcgtgcc | agctgcatta | atgaatcggc | caacgcgcgg | ggagaggcgg | tttgcgattt | 600 |
| gggcgctctt | ccgcttnctc | gctcactgac | tcgctgcgct | cggtcgttcn | gctgcggcga | 660 |
| gcgggtatcaa | gctactcaaa | ggcngtaata | ccgntatcca | cagaatcagg | ggataacgca | 720 |
| ggaaagaaca | ttgtgagcaa | aaggcancaa | aagggcagga | accgtaaaaa | n | 771 |

<210> 170

<211> 777

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(777)

<223> n = A,T,C or G

<400> 170

| | | | | | | |
|-------------|-------------|-------------|------------|------------|------------|-----|
| acacttgacc | tgatacgcca | acttggtacc | gagctcggac | cactagtaac | ggccgccagt | 60 |
| gtgctggaat | tcgcccttag | cgtggtcgcg | gccgaggtag | acagaatagc | tgagcagttc | 120 |
| acttcaggga | tcagggtcatc | tctgtctctc | ctagtttcac | catgttctgg | caataaaaaa | 180 |
| cacatattat | atcctgggtt | tctctatcct | tgcattacta | agggtactgt | ctctctttat | 240 |
| acatccttgt | atggttctcc | cagtatttagc | aagattgtat | atctgtaaa | aatgtccagt | 300 |
| tttgtaaaata | tttcctcgcc | tttttttttc | tttttttaca | tctgatttta | atgcttcggt | 360 |
| aacttcaaaa | ggaactggta | gagttcagaa | ggtgagctgt | tggttttcta | aacctcttcc | 420 |
| caggaagggg | acattgacac | ttgaattttt | gtcacctttt | tcctcattag | aaggaaagta | 480 |
| gaaaagcctta | ctgtaggatt | tttaaaaaaa | aatccatctc | accccatatt | ggtctttaat | 540 |
| aagtatagac | taattaacct | aagctacctt | taacaacgta | gaatttagat | gggttcatat | 600 |
| atgtgagaaa | aaactgaata | taggacaggg | gtcctacttt | tttccccacc | tctgtcgccc | 660 |
| aggctagagt | atagtgggtg | gatcttggcc | cactgnaacc | tctgcttctc | anggtcaagt | 720 |
| gattcttctc | gcctcacctt | ccaagtagct | gggattggaa | gaatatgccn | cccccccg | 777 |

<210> 171

<211> 782

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(782)
<223> n = A,T,C or G

<400> 171
nngggcccnt agagcatgct cgacggccgc cagtgtgatg gatattctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtactttt tttttttttt tttttttttt ttttaattaat 120
tagaaagtag gctgggcacg gtggctcatg cctataatcc cagcacttgg ggaggccgag 180
gatctctctt ctggtggatc acttgagggc aggagttaag agaccatcct ggccaacatg 240
atgaaaccct gtctctacta aaaatacaaa aagtagctgg gcgtgggtggc atactcttac 300
aatcccagct acttgggagg ctgaggcagg agaatcactt gaacctagga agcagagggt 360
gcagtggggc aagatcacac cactatactc tagcctgggc gacagagggt gggaaaaaag 420
taggacccct gtcttatatt cagggttttc tcacatatat gaacctatct aaattctacg 480
ttgttaaagg tagcttaggt taattagtct atactttatt aagaccaata tggggtgaga 540
tggatttttt tttaaaaatc ctacagtaag gctttctact ttccttctaa tgaggaaaaa 600
ggtgacaaaa attcaagtgt caatgtcccc ttcctgggaa gaggtttaga aaaacaacag 660
ctcaccttct gaactctacc agttcctttt tgaaagttaa ccgaagcatt aaaatcagat 720
gttaaaaaag aaaaaaaaaa ggcngggaaa atatttacaa aactgggaca tcttttacag 780
an 782

<210> 172
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 172
canttgacct gatacgccaa cttggtaccg actcggacca ctagtaacgg ccgccagtgt 60
gctggaattc gcccttttca gcgccgcccc gggcagggtac catcctgtgg ctctttaagg 120
aggcttctct ctttaattct ccatgaggca tccagggtgg tctgggctat gggaaagaacc 180
cttcaacttg ggagtagaca ggtgctccaa ttcatagtgc ccattctcag aggccttggtg 240
tgtgagtttc tccttcatgc ctctcttctg gctcttcttg tgctccataa tctgctggag 300
ctggtgcccc gcatagtctg gcttgggtgg cagcgggcca gccggcacag ctacaccaag 360
gacatctgac accatgtagg ggcgcagcca gccaccaag ggagtgtctc cggggtctgta 420
gtgggtctgt ttgtggtaga agagaagtc atctacctca aaagggaaat ccatagatag 480
cacatcacac aggccttctg gagtgcgaag gaagttcttt agccccacaa atttaaaagg 540
attaagcttg gttttctctc ccagtccttc ttcttctggt aactttgaat gcatccagta 600
gaatcggaaa tcaagtctgg caatcataaa aagggtgtcc ccgccagcac atcacattca 660
gaacgtagta ggtctggttt acctcattgt aaatgcaatc tagaatggtg taagcttttg 720
ctgntgaagt ttccctgtgc ctctggcaga atgaagaaan ctggtgacac aac 773

<210> 173
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 173
ntgggctctt nnagctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt 60
agcgtggctg cggccgaggc acagttcctt ggagcagagt gagcgccgcc ggaggttact 120
ggaaactgcag aaatccaagc ggctggatta tgtgaaccat gccagaagac tggctgaaga 180
tgactggaca gggatggaga gtgaggaaga aaaataagaa agatgatgaa gaaatggaca 240
ttgacactgt caagaagtta ccaaaacact atgctaatac attgatgctt tctgagtggg 300
taattgacgt tccttcagat ttggggcagg aatggattgt ggtcgtgtgc cctgttgga 360

```

aaagagccct tatcgtggcc tccaggggtt ctaccagtgc ctacaccaag agtggctact 420
gtgtcaacag gttttcttca cttctgccag gaggcaacag gcgaaactca acagcaaaaag 480
actacaccat tctagattgc atttacaatg aggtaaacca gacctactac gttctggatg 540
tgatgtgctg gcggggacac cctttttatg attgccagac tgatttccga ttctactgga 600
tgcattcaaa gttaccagaa gaagaaggac tgggagagaa aaccaagctt aatcctttta 660
aatttgtggg gctaaagaac ttcccttgca ctcccgaag cctgtgtgat gtgctatcta 720
tggatttctt tttgaggtag atggacttct cttctaccac aaacagacct ac 772

```

```

<210> 174
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1) ... (780)
<223> n = A,T,C or G

```

```

<400> 174
acactatgac ctgatacgcc aagcttggtg cagagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtgggc gcggccgagg tacaaaaata catttttcca 120
catacaaaag agagaaaaaa acaaagacat gtggcgggtg gcgaggggag gcccaatccc 180
aacaccctac aaggttccat ggaatggaga aggaacaaaa aaatccccc aaatctttggg 240
gtaagatgtg cccagaaaaa ggtgaaatct atgcaataaa acccagggtt tcttcaaadc 300
tagcatctag gatttctatc agagtttcaa ataactcaga tttctatcag aatttctacc 360
ctgaggtgac acctactaac ttaggttctt ttcatataaa atgaagacat ctttcaccag 420
aatgtatcaa gctataaaaac tggcttcaga gcctacactt agccagagtg gaaaaaaaat 480
agtgcattat ttcgacagca attttgaatt gatgcttgag gtctcaatcc accagcacc 540
agatatcatg ttacctccct cagtgaata caagttaaaa tgatgatctt atcgagatct 600
caatagagca cagtggcctt catgtttcgg gtaagaaggt gggaggagga atgaagccgg 660
gtattacacc cagcccaatg acagcttaag ccttaacatg cnggcattctt acaatgacca 720
taaacaaggg angggccaag canggctngc gatcattact ttgcgcacag aatgcatgt 780

```

```

<210> 175
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1) ... (771)
<223> n = A,T,C or G

```

```

<400> 175
gggcctctag agcatgctcg agcgcccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcggcc gccgggcagg tactaaaaa gctttgctta tggtggccag gggaaaaacat 120
ggcattctgt gcgcaaaagt aatgatcgcc agccctgcct tggccctcc cttgtttatg 180
gtcattgtaa gatgcccgca tgtaaggct taagctgtca ctgggctggg tgtaataacc 240
gcttcattcc tcctcccacc ctcttaccg aaacatgaag ggcactgtgc tctattgaga 300
tctcgataag atcatcattt taacttgtat tcaactgagg gagtaacat gatattctgg 360
tgctggtgga ttgagacctc aagcatcaat tcaaaattgc tgtcgaaaat atgcactatt 420
ttttttccac tctggctaag ttaggctct gaagccagtt ttatagcttg atacattctg 480
gtgaaagatg tcttcatctt taatgaaaga acctacagtt agtaggtgtc acctcagggt 540
agaaattctg atagaaattc tgattatttg aaactctgat agaaatccta gatgctagat 600
ttgaagaaaa cctgggtttt attgcataga ttccacctt tctggggcac atcttacc 660
aaaataattg gggatttttt tgnctcttct ccattccatg gaaccttgta ggggtgttgg 720
gattgggcct tccctngcca ccgcccacat gtctttgggt ttttctctct t 771

```

```

<210> 176
<211> 773
<212> DNA
<213> Homo Sapien

```

<220>
 <221> misc_feature
 <222> (1)...(773)
 <223> n = A,T,C or G

<400> 176
 atngggcctc tagagcatgc tcgagcggcc gccatgtgat ggatatctgc agaattcggc 60
 cttagcgtgg tcgcggccga ggtactcatg tatttttttt tttttccaga tctctttccc 120
 caagttgcta ttgtaagagt attctgctgc gtgtggatgc agttatacac attaaagcag 180
 atctggagtc tgaagtagct ataaagcagc tataaaacag aaatacatgc atagctgcag 240
 aaaccatgat aggtagagga cttttctttt ggttttgttt tgttttgttt tgttttgttt 300
 ttggttttac agagaagaga tttttattac aaagaaaaaa attccagtga attgtgcaga 360
 aatgctgggt tttacacccat cctaaagaaa aacttttaca gggtgttttg gaggtagaaaa 420
 aaggttataa agttggaatc tttaaattgta aaattaacca ttgagtgtca aagttctaaa 480
 agcagaactc attttgtgca atgaacataa ggaaagacta ctgtataggt tttttttttc 540
 tccttttaaa tgaagaaaag ctttgcttaa gggtgcata cttttattgg agtaaactctg 600
 aatgatccta ctcctttgga gtaaaactag tgcttaccag tttccaattg tatttagctt 660
 ctgggtggaa tttgaaaaaa aaagaaaaaa agaaaaagaa aacctaataa aaataggtga 720
 aagttccctg actattcagg tgaatacnca aaaaanaaan nnnnnnaann nnt 773

<210> 177
 <211> 772
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(772)
 <223> n = A,T,C or G

<400> 177
 acattngacc tgatacgcca gcttggtacc gagctcggat ccactagtaa cggccgcccag 60
 tgtgtggaa ttcgccctta gcgtggctgc ggccgaggta cagtaggaaa ataagaataa 120
 caacgggcaa aatcttttta gaacatttat gctttatctg ttttagcttc taaaacaatc 180
 ctgaaggatg aataattatc atgagtatag cagaatttaa ttttcctgt tgctccaaaa 240
 ttttaagtga aactttacgg ttgagagaaa taggtaaata aaaaaacttc ctaaaattct 300
 aaagacaatt gttgaataaa atttaagtga atgagttgt gcttcattat taacttttaa 360
 ctttccaata ggctttatta aatggaaaac tgaaatttac aaagtcttag agtagaagca 420
 tttttatcct ggctagggat tctctaagag aaccagtagc accaagatgc actggaacag 480
 tgcaacgaga gagttcatgc cttanggttt agaagcatat aagcaaaggg aatggtgccc 540
 acttcttact agaaaaattt cacaggctgg agtctgggag gaggagcctg ggatgacagt 600
 agaagtgtgc aggaagcact aagtctagcc tgtacctgcc cgggcggncg ctcgaagggc 660
 gaattctgca gatatccatc aactggtgg ccgctcgagc atgctctana gggcccaatt 720
 cgccctatag tgagtcggat tacanttnaa tggccgncgt tttacaacgt cc 772

<210> 178
 <211> 770
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(770)
 <223> n = A,T,C or G

<400> 178
 attgggcccc tnnagcatgc tcngcgggcc gccagtgtga tggatatctg cagaattcgc 60
 ctttcgagcg gccgccggg caggtacagg ctgacttag tgcttctgc acacttctac 120
 tgtcatccca ggctcctccg ccagactcc agcctgtgaa atttttctag taagaagtgg 180
 gcaccattcc ctttgcttgt atgcttctaa accctaaggc atgaactctc tcgttgcaat 240
 gttccagtgc atcttggtgc tactgggtct cttagagaat ccctagccag gataaaaatg 300

```

cttctactct aagactttgt aaatttcagt tttccattta ataaagccta ttggaaagtt 360
aaaagttaaa tatgaagcac aaactcattc acttaaaattt tattcaacaa ttgtcttttag 420
aatttttagga agtttttttta tttacctatt tctctcaacc gtaaagtttt cattaaaatt 480
ttggagcaac agggaaaatt aaattctgct atactcatga taattattca tccttcanga 540
ttgttttaga agctaaaaca gataaagcat aaatgttcta aaaagatttt gcccgttggt 600
attcttattt tcctactgta cctcggccgn gaccacgcta agggcgaatt ccagcacact 660
ggcgccgnt actagtggat ccgagctcgg tacccaanct tggcgtaatc atggncatag 720
ctgttctctgn gngaaatngn natncgntna caattncac acatacnann 770

```

<210> 179
 <211> 502
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(502)
 <223> n = A,T,C or G

```

<400> 179
cnnnttgacn tgattcgcca acttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggctcgg gccgaggtac ctggcccccactttctcgaa 120
taaaatgaaa ctatgattct tggcctcact cactaccatg tgacattgat caaatcactt 180
cacctctcca aacctcagag tctttatctg taagatggaa aaagtaacac ctacttcagg 240
ggctgtcatg aggattaaat aaatgtgccc agcaggtagt aagtatacaa cacaaagcat 300
ctaagtgttc attcatacat ttgcttattt tgcaattatt ggccacctgc caatgttggg 360
cactgttcta ggcacagggg atacagcaag ggcaaacacc taactactgg tggaggggag 420
acgataaaca aatacgtaaa gatttgtgcc aggtagtgat aaaagcaaag aatgactcat 480
ggagaggggtc agctggggag ac 502

```

<210> 180
 <211> 823
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(823)
 <223> n = A,T,C or G

```

<400> 180
gggccttnna gcatgctcga cggccgccat gtgatggata tctgcagaat tcgccctttc 60
gagcgccgcg ccgggcaggt actgcgtggg ctccccagct gacctctccc atgagtcatt 120
ctttgctttt atcactacct ggcacaaatc tttacgtatt tgtttatcgt cttccctcca 180
ccagtagtta ggtgtttgcc cttgctgtat ccctgtgcc tagaacagtg cccaacattg 240
gcaggtggcc aataattgca aaataagcaa atgtatgaat gaaccattag atgctttgtg 300
ttgtatactt actacctgct gggcacattt atttaatcct catgacagcc cctgaagtag 360
gtgttacttt ttccatctta cagataaaga ctctgaggtt tggagagggt aagtgatttg 420
atcaatgtca catggtagtg agtgaggcca agaatcatag tttcatttta ttcgagaagt 480
tggggggccg gtacctcggc cgcgaccacg ctaaggcgca attccagcac actggcggcc 540
gttactagtg gatccgagct cgggtaccaag cttggcgtaa tcatggtcat agctgtttcc 600
tgtgtgaaat tggtatccgc tcacaattcc acacaacata cgagccggaa gcataaagt 660
taaagcctgg ggtgcctaag gactgagcta actcacatta attgcgttgc gctcactgcc 720
cgcttttcag tcgggaaacc tgcgtgtcca gctgcattaa tgaatcggcc aacgcgccgg 780
gaaaagcngn ttgcgtattg gggcgctctt ncgctttctt gcn 823

```

<210> 181
 <211> 501
 <212> DNA
 <213> Homo Sapien

<220>

<221> misc_feature
 <222> (1)...(501)
 <223> n = A,T,C or G

<400> 181
 cantatgacn tgattcgcca acttggtacc ngctcggatc cctagtaacg gncgccattg 60
 tnctggaatn cgncccttagc gtggtcgcgg ccgaggtact ttcttcnttt nctnnaattt 120
 tccataacct agtgccngnt tgatnccctc acatggntgg ttcacatncn cngtacagan 180
 gnccggnacac catggganag ggcagcactc ntnccttctn angggatcctt ggcctaangg 240
 tgtacnaagg gagangatgg antntcttct gncctcncta nggcctaggg aaccagnag 300
 canatcccac nacnccctcn atnttttnagc caaggagaag ccccttggtg acnttnagtt 360
 ccaaccatta tacncagtgn gagaatggat nntcctgggc ccaaccatta cagggtgaag 420
 atatnaacag ttaaggaaga tacagtttng atgaggcctc anganggagc agntnacacc 480
 atcatannca tatgcaggga a 501

<210> 182
 <211> 830
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(830)
 <223> n = A,T,C or G

<400> 182
 ggcccttnga ngcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
 cgagcggccg cccgggcagg tacacgagaa gctccgagga tggctgaagt ccaacgtctc 120
 tgatgcggtg gctcagagca cccgtatcat ttatggaggc tctgtgactg gggcaacctg 180
 caaggagctg gccagccagc ctgatgtgga tggtctcctt gtgggtgggtg cttccctcaa 240
 gcccgaattc gtggacatca tcaatgccaa acaatgagcc ccatccatct tccctaccct 300
 tcccgccaag ccagggacta agcagccagc aagcccagta actgcccttt ccctgcatat 360
 gcttctgatg gtgtcatctg ctcccttctg tggtctcatc caaactgtat cttcctttac 420
 tgtttatata ttcaccctgt aatggttggg accaggccaa tcccttctcc acttactata 480
 atggttgga ctaaacgtca ccaaggtggc ttctccttgg ctgagagatg gaaggcgtgg 540
 tgggatttgc tccctgggttc cctaggccct agtgagggca gaagagaaac catcctctcc 600
 cttcttacac cgtgaggcca agatccctc agaangcang agtgcttgcc cttcccatgg 660
 tgcccggtgc tcttgtgctg ngtatgtgaa ccaccccatg tgagggaata aacctggcac 720
 tangtctttg aaaaaanaa aaacntnaaa aaaantccct tcggccgnga ccacgctaag 780
 gnccaattcc ancacaatgg gcgnnctgna ctantggatc caaccttntc 830

<210> 183
 <211> 484
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(484)
 <223> n = A,T,C or G

<400> 183
 ttgacatgat acccaacttg taccgagctc ggatccacta gtaacggccg ccagtgtgct 60
 ggaattcgcc ctttcnagcg gccgcccggg cagggtacccc agcccgcgcc actgagtttg 120
 ccttctatcc gggatatccg ggaacctacc agcctatggc cagttacctg gacgtgtctg 180
 tgggtgcagac tctgggtgct cctggagaac cgcgacatga ctccctgttg cctgtgggca 240
 gttaccagtc ttgggtcttc gctgggtggc ggaacagcca gatgtgttg cagggagaac 300
 agaaccacc angtcctttt ttggaaggca gcatttgagc acttcaacgg gcaaaacctc 360
 tgacgcctgc gcctttctgc gcggnccgag aaaccatttc gnactttaan attgaatctt 420
 ctctaagggtt ganaatttct ggatcccttg anaactttta canntgnnct ttantcctt 480
 taaa 484

<210> 184
 <211> 824
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(824)
 <223> n = A,T,C or G

<400> 184
 ggccttagag ctgctcgacg gccgccatgt gatggatata tgcagaattc gcccttagcg 60
 tggctgcggc cgaggtacca gattggccac tctagggtag aacaccaggt agattcctaa 120
 ggctcctgac tccaggccct ggctcccagt tggcatctct ggacctactt ggggtcacag 180
 tgaactcact gccctgaagg gaagatgcct ggctggatat gccacctgct gattggagag 240
 tccttgagacc ttgagtgaac acaggtggta gccaggcagt gatcatcata ggccttgggt 300
 gagccccagt gctgtgttg cttcaggctc gacacagagc tgtcccagtg gtagtcgcca 360
 caggggtgct tgtgtcatca tcccttctcc agctccaggc agctcagcac agagacatag 420
 tgtccatttg tttgagtga agtaaaagaa gagaacaaga gtctccacct agtaatccag 480
 ggaattctcc cagatcttac ccaagacaac caaggcaaga gacacagcat tactgggctg 540
 gaggtgcccc ctaatgcagg tatggctgca gtgaacaaag acttagatca caacaccaa 600
 atcccttcta atagttggaa agccttncca agaaggatgc cggacaaaca agcccaact 660
 gtgaagacta caacaaatac ctaactcttt caatgccag acactgaaga atatcccaa 720
 ctttaagacc atccatgaaa acatgacctt accaacaagc taaataagac accagtgacc 780
 aatcccagag agatagagat atgtgtcctt tcnnacagag aatt 824

<210> 185
 <211> 499
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(499)
 <223> n = A,T,C or G

<400> 185
 cacttgacnt gatacgccaa cttgtaccga ctccgatcca ctagtaacgg ccgccagtgt 60
 gctggaattc gcccttagcg tggctgcggc cgaggtactt tttctttttt nttntatttt 120
 tttttttcgt ctcccccagg ctttatctgt cttgactttt taaaaaagt tgggggcaga 180
 ttctgaattg gctaaaagac atgcattttt aaaactagca actcttattt ctttccttta 240
 aaaatacata gcattaaatc ccaaatccta tttaaagccc tgacagcttg agaaggctac 300
 tactgcattt ataggacctt ctgggtggtc tgctgttacg tttgaagtct gacaatcctt 360
 gagaatcttt gcatgcagag gaggtgaagag gtattggatt ttcacagagg aagaacacag 420
 ccgcanaatg aagggccagg cttactgagc tgccaatgga gggctcatgg gtgggacatg 480
 gnaaagaagg cacctagcc 499

<210> 186
 <211> 504
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(504)
 <223> n = A,T,C or G

<400> 186
 cacttgacnt gatacgccaa cttggtaccg agctcggatc ctagtaacg gccgccagt 60
 tgctggaatt cgcccttagc gtggctgcgg ccgaggtacc tcaggaggtc tgcaagtgtg 120
 tggttaggta aaaactganc tgtgcaaact cactgtatcc aagctcttct catgagagag 180
 cggacaacac tggcaagctt aaaggcaagt gttttcgttc ttttaattaa ataggctgtg 240

| | | | | | | |
|------------|-------------|------------|------------|-------------|-------------|-----|
| acaaaattaa | caataaaaact | agcccagAAC | caaccagccc | ggtaagtgtc | gtgcaaattct | 300 |
| tgcagtaaca | aaagaccatc | tgagagacta | cacgttggtc | tccagtccta | gcaagcgtcc | 360 |
| cattctctnc | acattcttat | caattgtagc | ttgacatggt | atctccttgg | cacattccat | 420 |
| aggaaaccag | cctctttctn | catctcgtag | tcgntcccc | ttataaccagc | catcgctgac | 480 |
| acgtttgata | gatgaagacg | acgt | | | | 504 |

<210> 187

<211> 822

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(822)

<223> n = A,T,C or G

<400> 187

| | | | | | | |
|------------|-------------|-------------|------------|------------|-------------|-----|
| gggcctctna | gctgctcgnC | ggccgccatg | tgatggatat | ctgcagaatt | cgcccttttcg | 60 |
| agcggccgcc | cgggcaggta | cgcggggact | gggtttttct | ccttttgtag | ccttttcctt | 120 |
| tagtctcctc | ttcccgggtg | ttggtaaaaa | gaggtgaatt | gacagcctat | gttgaagaca | 180 |
| ctgtgctttt | ctcaagaagg | acatccaaac | agcaagtcta | cttctttctc | tttaacgatg | 240 |
| tgctcattat | caccaagaag | aagagtgaag | aaagttacaa | cgtcaatgat | tattccttaa | 300 |
| gagatcagct | attgggtggaa | tcttgtgaca | atgaagagct | taattcttct | ccaggggaaga | 360 |
| acagctccac | aatgctctat | tcaagacaga | gctctgccag | tcacctcttt | actctgacag | 420 |
| tccttagtaa | ccacgcgaat | gagaaagtgg | agatgctact | aggagctgag | acgcagagcg | 480 |
| agcgagcccg | ctggataact | gccctgggac | acagcagcgg | gaagccgcct | gcagaccgaa | 540 |
| cctcactgac | ccaggtggaa | atcgttagggt | catttactgc | taagcagcca | gatgaactct | 600 |
| ccctgcaggt | ggctgacgtc | gtcctcatct | atcaacgtgt | cagcgatggc | tggtatgagg | 660 |
| gggaacgact | acgagatgga | gaaagaagct | ggtttcctat | ggaatgtgcc | aaggagataa | 720 |
| catgtcaagc | tacaattgat | aagaatgtgg | agagaatggg | accttgctag | gactggagac | 780 |
| caacgtgtag | tctctcaaan | gncttttgggt | actgcaagat | tg | | 822 |

<210> 188

<211> 504

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(504)

<223> n = A,T,C or G

<400> 188

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| tatgancatg | atacgccaac | ttggtaccga | gctcggatcc | actagtaacg | gcccgcagct | 60 |
| gtgctggaat | tcgcccttag | cgtgggtcgcg | gccgaggtag | caaaaaagta | aacattgata | 120 |
| atatggcctg | acaacaatca | gatatgctaa | gctctagaag | caaaagcaag | gtaggattgc | 180 |
| ctccaaatgt | tgacaggat | tagccatacc | acagtaacta | gatctaattg | gagggctaaa | 240 |
| tgcttgagga | ggcagaaccc | taaaggatgc | ttagttagat | ctccatgctg | ccgccgagtg | 300 |
| gcttgatgct | ccattacacc | ctccttggat | ccaaccttcc | attaaggctg | aaggctctag | 360 |
| agggcagagt | attcaagatg | ttagatctgg | tcgaagccca | aattctagag | ttaaaagcag | 420 |
| aggggttctt | agtggctgaa | aaaaaaccaa | acctgatgac | atttgggact | ccagttttga | 480 |
| ggaaaggctc | tgatgatgag | gctt | | | | 504 |

<210> 189

<211> 842

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(842)

<223> n = A,T,C or G

<400> 189
 nnnnnnnntt tttgaaccgg cccntntnang catgctcgac ggccgccatg tgatggatat 60
 ctgcagaatt cgccctttcg agcggccgcc cgggcaggta cccttctcgc ttttgccatt 120
 agccaaggat agaagctgca gtggatttaa ttttgatata atctttcaaa ccagcttcat 180
 gtggcttccc ttttctttgt tcaagatgag ggccaggagg ggaaacatca cacctgccct 240
 aaacctgtt cctggaggtc agcatttgat ctgttgcaag ccctctttc tgtccctct 300
 tcctaccctg cctcccatga ctttgctcct cacacttttg gaaccatgcc ttccgggggg 360
 gcccatctct tctggcgcgc cttgtctctg ggccacttgg agtgtgtgat aaatcagtca 420
 agctgttgaa gtctcaggag tctctggtag cctgcagaag taagcctcat catcagagcc 480
 tttcctcaaa actggagtc caaatgtcat cagggtttgt tttttttcag ccactaagaa 540
 cccctctgct tttaactcta gaatttgggc ttggaccaga tctaactct tgaatactct 600
 gccctctaga gccttcagcc ttaatggaag gtggatcca aggagggtgt aatggagcat 660
 caagccactc ggccgagca tggagctata actaagcatc ctttagggtt ctgcctctcc 720
 aggcathtag cccctacatt agatctagtt actgtggtat ggctaatacc tgtcaacatt 780
 tggaggcaat cctaccttgc ttttgcttct agagcttagc atatctgatg gttgcaggcc 840
 cg 842

<210> 190
 <211> 503
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)... (503)
 <223> n = A,T,C or G

<400> 190
 actatgacct gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag 60
 tgtgtcgaa ttcgcccttt cgagcggccg cccgggcagg taccatgctg acttcttggg 120
 atcttttaag gcctaatttt cccttccttg agattactgt agtgtgttcc agctaatttc 180
 tatttggaag cgagttggaa cagctgaaaa ctaggatata ttgaaggcaa agcagcctca 240
 cgtcagtttt ttatcagctc atttgggaag tttttttttt ttttttttaa ttaattagaa 300
 agtaggctgg acacggtggc tcatgcctat aatcccagca cttggggagg ccgaggatct 360
 cctctctggt ggatcacttg agggcaggag ttaagagacc atcctggcca acatgatgaa 420
 accctgtctc tactaaaaat acaaaaagta nctgggcgtg gtggcatact cttacaatcc 480
 cagctacttg ggaggctgag gca 503

<210> 191
 <211> 829
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)... (829)
 <223> n = A,T,C or G

<400> 191
 gggcctctga gcatgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
 cgtggctcgc gccgaggtac tttttttttt tcttttttta catctgattt taatgcttcg 120
 ttaacttcaa aaggaactgg tagagttcag aaggtagct gtgtgttttc taaacctctt 180
 cccagggaag ggacattgac acttgaattt ttgtcacctt ttccctcatt agaaggaaag 240
 tagaaagcct tactgttaga tttttaaaaa aaaatccatc tcaccccata ttggctcttaa 300
 ataagtatag actaattaac ctaagctacc ttaacaacg tagaatttag atgggttcat 360
 atatgtgaga aaaacctgaa tataggacag gggctcctact tttttcccca cctctgtcgc 420
 ccaggctaga gtatagtggg gtgactcttg cccactgcaa cctctgtctc ctaggttcaa 480
 gtgattctcc tgcctcagcc tcccaagtag ctgggattgt aagagtatgc caccacgcc 540
 agctactttt tgtattttta gtagagacag ggtttcatca tgttggccag gatggtctct 600
 taactcctgc cctcaagtga tccaccagag aggagatcct cggcctnccc aagtgtctgg 660
 attataggca tgagccaccg tgtccagcct acttttctaata taattaaaaa aaaaaaaaaa 720

aaactttcca aatgagctga taaaaaactg acgtgaggct gctttgcctt caataatacc 780
tagttttcag ctgtccaact cgtttccaaa tagaaattaa gctggggang 829

<210> 192
<211> 503
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(503)
<223> n = A,T,C or G

<400> 192
ntatgaccat gattacgcca agcttggtac ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtactgcct ttgggcttct 120
tctctctcct gttttctcct ctogaattct ttactgtttt aatacattgt tcttctggct 180
gaggctggtc aaagctacac tgatcttcaa ataaaggctc gtcaatgcta cactgttctt 240
caagcaacgg ctggtgaact tgttctgaca aaggatggtc gacttttctt gcttgcttcc 300
tatgtctttc ctcttcagct aaatagagat gtttcagatt atctgggtat cgatctgtga 360
attgagattc cagtgcgctt tgagccttct tttccttccg tagcaatttc ttgtaacttt 420
gctgtatttt cagttttctt cgaaaagcaa agccttgctc ctgcgcaacg ctccccacga 480
agcttgccgg tggttaggcc gca 503

<210> 193
<211> 834
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(834)
<223> n = A,T,C or G

<400> 193
ancggctctc tagagctgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gggcncgag gtacaattca ttatgtgttt cattaattac ctttattaaa 120
aacaacacaa ttatattaca atagggacaa aaaatgttta agcaaagtga aacgaaacca 180
tgacataccc aaactcagga ggaggcaaca aaggcagtcg taaagggaag cttacagctc 240
cagatgctta aattaaaaag aagaaagatc tcaaaccat gctaaaggga agcttacagc 300
tacagatcct taaattaaaa agaagaaaga tctcaaacc atgctaaagg gaagcttaca 360
gctgcagatg cttaaattaa aaagaagaaa gatctgaaac ccttgctaaa gggaagctta 420
tagctgcagg tgcttaaatt aaaaagaaga aagatctcaa atcaataacc taacattaca 480
cctgaagggg gggaaaaaaa ctaatgacaa accaagcaaa aggaagaaaa taacagatta 540
gagcagagat aagcagaata agaccagaaa aaaggaaaaa aacactgagt ttgttttttt 600
aaagatcaat aaaaatttta aaactcacag ctatattaag aaaaaagaga aatctcaaat 660
actaaaaatca taagtaaaag angtgacagt acaggaataa gaatgtgaga cagaagacat 720
ggcggcctac caccgcgaag ccttcgtggg gagcgttcgc ganggacaag gctttgcttt 780
tcgaagaaaa ctgaaaatnc cgcaaagttc cagaaattgt tcngaagaaa agaa 834

<210> 194
<211> 502
<212> DNA
<213> Homo Sapien

<400> 194
cacttgacct gattcgccaa gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgccctttc gagcgccgc cgggcagga cgctgaggcc tgggagtctc 120
ttgactccac tacttaattc cgtttagtga gaaacctttc aattttcttt tattagaagg 180
gccagcttac tggttggtggc aaaattgcca acataagtta atagaaagtt ggccaatttc 240
accccathtt ctgtggtttg ggctccacat tgcaatgttc aatgccacgt gctgctgaca 300
ccgaccggag tacctcggcc gcgaccacgc taagggcgaa ttctgcagat atccatcaca 360

```

ctggcgggcg ctcgagcatg catctagagg gcccaattcg ccctatagtg agtcgtatta 420
caattcactg gccgtcgttt tacaacgtcg tgactgggaa aaccctggcg ttaccaact 480
taatcgctt gcagcacatc cc 502

```

```

<210> 195
<211> 848
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(848)
<223> n = A,T,C or G

```

```

<400> 195
gnnnnnntt tnnaatgggc ctctnnagca tgctcgagcg gccgccatgt gatggatata 60
tgcagaattc gcccttagcg tggtcggggc cgaggctactc cggtcggtgt cagcagcacg 120
tggcattgaa cattgcaatg tggagcccaa accacagaaa atgggtgtgaa attggccaac 180
tttctattaa cttatgttgg caattttgcc accaacagta agctggccct tctaataaaa 240
gaaaattgaa aggtttctca ctaaaacggaa ttaagtagtg gagtcaagag actcccaggc 300
ctcagcgctc tgcccgggcg gccgctcgaa agggcgaatt ccagcacact ggcggccggt 360
actagtggat ccgagctcgg taccaagctt ggcgtaatac tggtcatagc tgtttcctgt 420
gtgaaattgt tatccgctca caattccaca caacatacga gccggaagca taaagtgtaa 480
agcctggggg gcctaataag tgagctaact cacattaatt gcgttgcgct cactgcccgc 540
tttccagtcg ggaaacctgt cgtgccagct gcattaatga atcggccaac gcgcggggag 600
aggcggtttg cgtattgggc gctcttcgcg ttcttcgctc actgactcgc tgcgctcggt 660
cgttcggctg cggcgagcgg tatcagctca ctcaaaggcg gtaataccgg tattcacaga 720
attcagggga taacgcagga aagaacatgt gagcaaaagg ncagccaaag gccaggaacc 780
cgtnaaaagg ccgcttgctt ggcgttnttc cataggctcc gcccccttga cgagcatnac 840
aaaaatct 848

```

```

<210> 196
<211> 511
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(511)
<223> n = A,T,C or G

```

```

<400> 196
canntatgac ctgattacgc caagcttggt accgagctcg gatccactag taacggccgc 60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtactttttt tttttttttt 120
ttttttttt ttttagggtt ataaaagccc ttttataaag ccatttttaa acaaaaacaaa 180
aaaaaagttt acaaaagaaa aaaagatnca gaaaaagaat aacttgcttc atatgtccca 240
aaaagagaaa aaaaataaagg ggacaatgcc aacatgctca acaataaagg cttctttttc 300
ttattttttt aatacaaaat ncaagcaaag gatacacata cttaaacag agctcaggag 360
canacacgca ntcttgaaa cccttcaata aancaaaagc aggagtttgn tttttctttg 420
tctatgcana tacatacaga gactgggata tgtaaaaatt aagtatnaca aaagaccatt 480
acacgattct accaatgcat gttgcatctn g 511

```

```

<210> 197
<211> 816
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(816)
<223> n = A,T,C or G

```

<400> 197

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| gggcctctag | agcatgctcg | acggcccgcca | tgtgatggat | atctgcagaa | ttcgcccttt | 60 |
| cgagcggccg | cccgggagc | tactaaggaa | gttaaagttt | gaatgtaacc | actttattta | 120 |
| aaagggtttt | ttctttaatt | taaatgaaat | gggggtgaag | tgaacatgat | tttggtgacc | 180 |
| atgttcgtga | attacagatg | caacatgcat | tggtagaatc | gtgtgatggg | cttttgtgat | 240 |
| acttaatttt | tacatatccc | agtctctgta | tgtatctgca | tagacaaaga | aaaaacaaac | 300 |
| tcctgctttg | cttttattga | agggtttcca | ggactgctg | tctgctcctg | agctctgttt | 360 |
| taagtatgtg | tatcctttgc | ttgtattttg | tattaaaaaa | ataagaaaaa | gaagccttta | 420 |
| ttgttgagca | tggtggcatt | gtccccttta | tttttttctc | tttttgggac | atatgaagca | 480 |
| agttattctt | tttctgtatc | tttttttctt | ttgtaaactt | tttttttggt | ttgtttaaaa | 540 |
| atggctttat | aaaagggttt | ttataaccct | aaaaaaaaaa | aannnnnnna | aaaaaaaaaa | 600 |
| gtcctcggcc | gcgaccacgc | taaggcgcaa | ttccagcaca | ctggcggncc | ttactagtgg | 660 |
| atccgagctc | ggaccaagct | tggcgtaatc | atggnccatg | ctgttcctgt | gtgaaatgtt | 720 |
| atccgctcac | aattcccaca | catacaaccc | ggagcataaa | gtgtaaacct | ggggtgccta | 780 |
| atgagtgagc | tactcaataa | ttgcgttgcc | ctcang | | | 816 |

<210> 198

<211> 498

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(498)

<223> n = A,T,C or G

<400> 198

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| tgattcgcca | agcttggtac | cgagctcgga | tccactagta | acggcccgcc | agtgtgctgg | 60 |
| aattcgccct | tcgagcggnc | gnccggggcag | gtacaattca | gagcaggtgt | ccatagaaac | 120 |
| aactaggntt | gaaaaaactg | taagacaatt | cacagttgaa | atcaaaccac | cactgtgaat | 180 |
| gtgttaata | cttgccatat | aacaacactt | taacattgat | cttgctaaat | aaggctatga | 240 |
| ttcataagat | gcattggatt | ccaaagctgn | ttaacattct | tataaattaa | ttcacaggat | 300 |
| tcaaatagtt | gcttttttagc | ttcaactggg | tattagcaaa | aatnatacaa | aatgatcccc | 360 |
| gtgcaagcac | aaattttacct | tcctttctaaa | taaaacatga | cagattatat | tacaacttga | 420 |
| tagcctctct | tttaaaaagt | ctgtgacatt | attaaagagg | tgacggaatg | cttgntttgc | 480 |
| aaaccccaac | acatcttt | | | | | 498 |

<210> 199

<211> 837

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(837)

<223> n = A,T,C or G

<400> 199

| | | | | | | |
|------------|-------------|------------|------------|-------------|-------------|-----|
| nnnnnnntnn | cantgggect | ctagagctgc | tcgacggccg | ccatgtgatg | gatattctgca | 60 |
| gaattcgccc | ttagcctggg | cgcgcccgag | gtaccttgag | atctgagcaa | ctgtgttaat | 120 |
| gaagtaatag | caatgggtcca | cagtgaagaa | tgtgttgggg | tttgcaaaac | aagcattccg | 180 |
| tcacctcttt | aataatgtca | cagacttttt | aaaagagagg | ctatcaagtt | gtaatatata | 240 |
| ctgtcatgtt | ttatttagga | aggaaggtaa | atttgtgctt | gcacggggat | cattttgtat | 300 |
| tatttttgc | aatatccag | tgaagctaaa | aagcaactat | ttgaatcctg | tgaattaat | 360 |
| tataagaatg | ttaaacagct | ttggaaatac | atgcatctta | tgaatcatag | ccttatttag | 420 |
| caagatcaat | gttaaagtgt | tgttatatgg | caagtattta | acacattcac | agtgtttggt | 480 |
| tgatttcaac | tgtgaattgt | cttacagttt | tttcaaacct | agttgtttct | atggacacct | 540 |
| gctctgaatt | gtacctgccc | gggcggccgc | tcgaaggcgc | aattccagca | cactggcggc | 600 |
| cgttactagt | ggatccgagc | tcggtaccac | gcttggcgta | atcatgggtca | tagctgnttc | 660 |
| ctgtgtgaaa | ttggatcccc | gctcacaatt | ccacacaaca | tacgagccgc | aagcataaag | 720 |
| tgtaaagcct | ggggtgccta | atgagtgagc | taactccatt | aattgcgttg | cgctcactgg | 780 |
| cccgttttnc | agtcnggaaa | cctgtctgcc | anctgcatta | atgaatcggc | caccccg | 837 |

<210> 200
 <211> 506
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(506)
 <223> n = A,T,C or G

<400> 200
 nnnnttgacc tgattacgcc aagcttggtg ccgagctcgg atccactagt aacggccgcc 60
 agtgtgctgg aattcgccct tagcgtgggc gcggccgagg tactgcatcc ataatttatc 120
 gccatgtgca acagctttgc gttttctaag gcacaatttt taatgaaatg atgtgtagat 180
 ttcaatctaa taacagctca tccaaatgac aaatatgggc gaaatccctc cagtggctga 240
 ggaaatttct gcacctatat ggaaccacaca tgcaaagaac ccatctagca tgtaataaat 300
 aatcgctagc catactcaat aagacacgga aaaaattattg cttacataac agaaaaacat 360
 ctacttgacc cccttttatg actacatcaa tctaactagga gtgtatccat agtctacatt 420
 cacaaaaatg catcttgact tatttgccat tgatttaagg cagaataaat agtccccctt 480
 tccccagtct taacaacaaa aaacaa 506

<210> 201
 <211> 864
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(864)
 <223> n = A,T,C or G

<400> 201
 ccnntanagc atgctcgacg gccgcccggg caggtacctt ggaagttatg tcattaatat 60
 aggctgggtc atcaaataaa gcaaaacctt gcaatatcag ctagatttac actccgggac 120
 gttgcccata ggtaggaaga aagcaggggg aaatatattca gtcattcatt ccaaagtcac 180
 tatcaaaatc tgtgaggaag tttaattctc caaagagtca atgtcagaca tcaggcctct 240
 gttgcctgct tctctcgagg cactagatta ggagtcttca ataagagact taacatgagg 300
 tatatggaag atgaggcacc gagataagtt catcattagg tgtgagcact gctcaccctt 360
 gctggcaagt tctccttaag ggcctgaagc acagggtgtc aaagaaaagc gtttaagtcca 420
 tcttaataga atctatgtgg tatatgatgt ggtcagcccc tggctctgtga tcagcaagaa 480
 cctacagcac agattatgcc ctgcccactt caatgaatac ctactctcct ncattctcca 540
 tcaatttttt gctatcaaga ctccggacct tgcccatgga gaagtttaga gaggaactct 600
 tgtggagagc tgggttaattt tctgcctgtg gcgacaagtt tcaacttggc caagaaangg 660
 agtcaagtta ttaaaaagca tcacaatgta gaattctcca ggctggggtt tttggntttt 720
 tnggtgggtn aanactgggg gnaaaagggg ggacctattt aaattccngg cctttaaaat 780
 caaatgggcc aaaattaagt tcaaggaatg gaccattttt nggggnaaat ggttngaacc 840
 ttntngggan ttccncctt ccct 864

<210> 202
 <211> 505
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> misc_feature
 <222> (1)...(505)
 <223> n = A,T,C or G

<400> 202
 gnnntnanac nttactaat antganttag tnccgactcg atccctctna ctncantnan 60
 ancngtngaa ttgccctnn tagcggccnt ccngncaggt acaaccagtt tggaaaacag 120

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tntcacagtt | tttttaaaaa | ttacatatat | aaccancaac | tgaccagcc | atttcactcc | 180 |
| taggtattta | cccaagatna | actgaagtgt | agatacaagc | anagacttgn | gcacaagtgt | 240 |
| tcatggtaag | ctttactngc | antagctcca | aactanggac | aactcaaata | gccaacangg | 300 |
| aaatggacaa | attatgttac | tttcatacag | tggaatatcc | tcttgtgata | aaaataantg | 360 |
| aacanttgat | acatggatga | atctcaaaat | aattatgctg | agtaaaagaa | gccagacaaa | 420 |
| atgtacagtg | catacagcta | ttcatgtggg | tgccagctcc | atccccagc | gacctcttca | 480 |
| tacggncaga | gggtggcatg | gcanc | | | | 505 |

<210> 203

<211> 819

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)... (819)

<223> n = A,T,C or G

<400> 203

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| ggcctcngca | gcatgctcga | ncggccgcca | tgtgatggat | atctgcagaa | ttcgccctta | 60 |
| gcgtggtcgc | ggcggaggta | gcgaggagag | caggaccgga | gcgcggggcca | agctggagat | 120 |
| ggatgatgct | gaccctgagg | aaagaaacta | tgacaacatg | ctgaaaatgc | tgtcagatct | 180 |
| gaataaggac | ttggaaaagc | tattagaaga | gatggagaaa | atctcagtgc | aggcgacctg | 240 |
| gatggcctat | gacatggtgg | tgatgcgcac | caaccctacg | ctggccgatt | ccatgcgtcg | 300 |
| gctggaggat | gccttcgtca | actgcaagga | ggagatggag | aagaactggc | aagagctgct | 360 |
| gcatgagacc | aagcaaaggc | tgtaggcccc | actggcccac | cacagctgcc | atgccaccct | 420 |
| ctgcccgat | gaagaggtca | ctgggggatg | gagctggcac | ccacatgaat | agctgtatgc | 480 |
| actgtacatt | ttgtctggct | tcttttactc | agcataatta | ttttgagatt | catccatgta | 540 |
| tcaattgttc | acttattttt | atcacaagag | aatattccac | tgtatgaaag | taacataatt | 600 |
| tgteccatttc | cctgttggct | atttgagttg | tccctagttt | ggagctattg | cgagtaaagc | 660 |
| taccatgaac | atttgtgcac | aagtctttgc | ttgtatctac | acttcagttt | atcttgggta | 720 |
| aatacctang | agtgaatgg | cttgggtcaa | tntgttgggt | ggatatgtaa | ttttttaaaa | 780 |
| aaaactngna | tactgttttc | caaactgggt | tgtccctct | | | 819 |

<210> 204

<211> 840

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)... (840)

<223> n = A,T,C or G

<400> 204

| | | | | | | |
|-------------|------------|-------------|-------------|------------|------------|-----|
| gnnnnntttn | nnctnntgga | accggttttg | nnaagctgct | cgacggccgc | catgtgatgg | 60 |
| atatctgcag | aattcgccct | tagcgtgggtc | gcggccgagg | tacctnaga | tctgagcaac | 120 |
| tgtgttaatg | aagtaatagc | aatgggtccac | agtgaagat | gtgttggggg | ttgcaaaaca | 180 |
| agcattccgt | cacctcttta | ataatgtcac | agactttttt | aaaagagagg | ctatcaagtt | 240 |
| gtaataataat | ctgtcatggt | ttatttagga | aggaaggtaa | atttgtgctt | gcacggggat | 300 |
| catttttgat | tatttttgct | aatacccagt | tgaagctaaa | aagcaactat | ttgaatcctg | 360 |
| tgaatttaatt | tataagaatg | ttaaacagct | ttggaaatac | atgcatctta | tgaatcatag | 420 |
| ccttatttag | caagatcaat | gttaaagtgt | tgttatatgg | caagtattta | acacattcac | 480 |
| agtgtttggt | tgatttcaac | tgtgaattgt | cttacagttt | tttcaaacct | agttgtttct | 540 |
| atggacacct | gctctgaatt | gtacccctca | gtcaccagca | aaagcatttc | cacccctttc | 600 |
| aacccccaat | cagaccactg | cattcagtgg | tattggagga | ctttcatcac | agcttccagt | 660 |
| aggtgggtct | tggcacaggg | agnctgactg | gtatangaac | tgggtgctct | ggactccctg | 720 |
| cagtgaataa | cgaccctttt | gtacctgccc | gggcccgcgc | taagggcgaa | ttccacacac | 780 |
| tggccggccg | ttactagtng | gatccnaact | cggtcctaaan | cttggcgat | tcatggtcnt | 840 |

<210> 205

<211> 497

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(497)
<223> n = A,T,C or G

<400> 205
nnnnttgacc tgattacgcc aagcttggtg ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtgggc gcggccgagg tacatttact ataaaagctg 120
ttgcatttta gacaacttgt tgtttttatt ttttactgtt tctcagaggc attttagaat 180
aaatacttta aatgaaagtt agtataaccg atatagaaca ctggcccacc cagagcagta 240
acatcttttg gacggactca catatgaggt ggatcatttc agtttgtaa atcttacact 300
gtgtatagat aactataata tgtattgcat taatcacact acatagaaag gaaatgtcat 360
ggaagttcgc tagtgaaaaa caaaaagtta ccattattt ttattaaaga gtagggacta 420
gcttttgag tatgagaaaa aaatcagat atacttcctc aggaacaata aatcactcac 480
ttgcctcacc tgttttt 497

<210> 206
<211> 820
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(820)
<223> n = A,T,C or G

<400> 206
gggcctntag aagcatgctc gagcgccgc cagtgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtacatgt attgaagcta gaatcgagtc aagaaaaata 120
aagccccatt ctccaactgc aaaatgtgct tccccataat gaacactagt caccagcaca 180
gaataatctc caacattttc taaattctaa ttgccaaactg tttctattta tatttgattt 240
atatttcatt tggagtctgt tacatggcag cttaggcaga ctagatcttg tttttccaa 300
tgcagcataa tgagtatgat ctatttcttt tcaaataatc ttgagatcc caggaaaaaa 360
aatgctctgc tccattgagc tataatgtaa atgtgtttgt ttaaaaaaca ggtgaggcaa 420
gtgagtgatt tattgttctt gaggaagtat atctgatttt ttttctcata ctccaaaagc 480
tagtccctac tctttaataa aaataatggg taactttttg ttttctacta gcgaacttcc 540
atgacatttc ctttctatgt agtgtgatta atgcaatata tattatagtt atctatacac 600
agtgtaatg ttaacaaact gaaatgatcc acctcatatg tgagtccgtc caaaagatgt 660
tactgctctg ggtgggccag tgttctatat cgggtatact aactttcatt taaagtattt 720
attctaaaat gcctctgaga aacagtaaaa ataaaaacca caagttgcta aaatgcaaca 780
gcttttatag taaatgtcct tgggcccgcga ccacgcttag 820

<210> 207
<211> 496
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(496)
<223> n = A,T,C or G

<400> 207
cnnttgacct gattacgcca agcttggtac cgagctcggg tccactagta acggccgccca 60
gtgtgctgga attcgccctt agcgtggctg cggcccaggg tacaaaaagac aaaatcagag 120
ttcaatttca gcagcaagac ttatcaagaa tttaatcact atttgacatc aatggttggt 180
tgcctgtgga cgtccaaacc ctttgggaaa ggaatatata ttgaccctga aatcctagaa 240
aaaactggag tggctgaata taaaaacagt ttaaatgtag tccatcatcc ttctttcttg 300
agttacgctg ttttcttttt gctacaggaa agcccagaag aaaggacagt aaatgtgagc 360

```
tctattcngg gaaagaaatg gagctggtat ttggactatt tattttcaca ngggttacaa 420
ggcttgaaac tttttataag aagtagtggt catcattctt ncattcccag agcagaaggc 480
ataaactgca caatca 496
```

<210> 208
<211> 810
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(810)
<223> n = A,T,C or G

```
<400> 208
gcatgctcga cggcccgcca gtgtgatgga tatctgcaga aattcgccct ttcgagcggc 60
cgcccgggca ggtactcctt gaggatggca gtctgtcagt gaaatgaaaa tgggaactca 120
agatgagcca ctttgctcta gcaatgagga gtgagtttag tccagtgtgt tcagtttatg 180
tcaacattca ttttaatttg attggtgcag tttatgccct ctgctctggg aatggaagaa 240
tgatgaaca tacttcttat aaaaagtctt aagccttgta acccctgtga aaataaatag 300
tccaaatacc agctccattt ctttccccga atagagctca catttactgt cctttcttct 360
gggctttcct gtagcaaaaa ggaaacagcg taactcaaga aagaaggatg atggactaca 420
tttaactgt ttttatattc agccactcca gttttttcta ggatttcagg gtcaatatat 480
attcctttcc caaagggttt ggacgtccac aggcaaccaa ccattgatgt caaatagtga 540
ttaattctt gataagtctt gctgctgaaa ttgaactctg attttgtctt ttgtacctcg 600
gccgcgacca cgctaaggcg gaattccagc acactggcgg ccggtactag tggatccgag 660
ctcgggtccaa gcttggcgta atcatgggca tagctgtttc ctggtgtgaa attgntatcc 720
gctcacaatt ccacacaaca tacgaaccgg aagcattaag tgtaaagcct ggggtgccta 780
atgagtgcgc taacttacat taattgcgnt 810
```

<210> 209
<211> 495
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(495)
<223> n = A,T,C or G

```
<400> 209
cnnttgacct gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggctgc ggccgaggta caactctcca gggcacaata 120
cgtttacagc tgcttttctt tcacatactt ttctaattca gaactactca caattctaag 180
caaattccca ttcacgaagt ctgtccataa tgcgaccttc tcttttttta acatatacat 240
cttaaaaaac aaatatataa aaaattctta ttttgctgga atgctttcaa tttttcacat 300
tttacatgat catcacattt atttcttata ttgaaaggca tggtttctgt tgacatgtcg 360
tgcaaagcca aaaaaaaaaa anaaaaaaaaa aagggtctgga ttgcttttca attggtctaa 420
cacttttctt tgtctaggct ttggatttta aagttcatga cagccccacc accagtagaa 480
accccaaggc ttgca 495
```

<210> 210
<211> 820
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(820)
<223> n = A,T,C or G

<400> 210


```

gggcctcaga gctgctcgan cggccgccat gtgatggata tctgcagaat tcgccctttc      60
gagcggccgc ccgggcaggt acccacgttt tgctccacac tccttgaccg caggggctcg      120
gacacaaacc cctgtcacca ggagagtcag tcagcactac ttgggagggc taaagggaaa      180
tttgaaata aaattccaaa gtttgagta aaaaaattca agtggtgatt ttatatctt      240
tccctttctg acacagccta aagcgtaggg ggaacatgtg tttatctgtg ggagataaac      300
aagatggagt cccaaagact ttaacaaaat atttttttaa aaatccacta gaatagaaaa      360
tacattattt agatatactt tatgctgaga gtgagtatat atgcttgctc tatttaaac      420
tgtgagaaaa agtggatatcc cttgatacat ttagaaatat gggggctatc ttgtttcatt      480
gtgggggtgg ggcagaagga gaataaatgc aggatgaccc tgttgaagga atcttancat      540
ggccaacagg ggacgtttcc agtcgattac caggaatatgc aagccttggg gtttctactg      600
gtgtgggggc tgtcatgaac tttaaaatcc aaagcctaga caaggaaaag tgtagacca      660
attgaaaagc aatccagccc tttttttttt nnnntttttt ttggccttgc cagcacatgt      720
caacagaaac catgcctttc aatntaagga aataaatgtg atgatcatgt aaaatgtgaa      780
aaattgaaag cattncacca aataaggaat tttttattnn      820

```

<210> 211

<211> 499

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(499)

<223> n = A,T,C or G

<400> 211

```

canttgactg attacgcaa gcttgggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgtctgaa ttcgccctta gcgtgggtcgc ggcccgaggt acaactctcc agggcacaa      120
acgttttacag ctgcctttcc ttcacatact tttctaattc agaactactc acaattctaa      180
gcaaattccc attcacgaag tctgtccata atgcgacctt ctcttttttt aacatataca      240
tcttaaaaaa caaatatata aaaaattctt attttgtctg aatgctttca atttttcaca      300
ttttacatga tcatcacatt tatttcttat attgaaaggc atgggtttctg ttgacatgtc      360
gtgcaaagcc aaaaaaaaaa aaaaaaaaaa aagggctgga ttgcttttca atngggctca      420
acacttttcc ttgtctaggg tttggatttt aaagtccatg acagcccccac caccagtaga      480
aaccceaagg cttgcattt      499

```

<210> 212

<211> 821

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(821)

<223> n = A,T,C or G

<400> 212

```

gggccntan agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt      60
tcgagcggcc gcccgggcag gtacccacgt tttgctccac actccttgac cgcaggggct      120
cggacacaaa cccctgtcac caggagagtc agtcagcact acttgggagg gctaaagggg      180
aatgttgaaa taaaattcca aagtttgagg taaaaaaatt caagtgttga ttttatattc      240
tttccctttc tgacacagcc taaagcgtag ggggaacatg tgtttatctg tgggagataa      300
acaagatgga gtcccaaaga cttaacaaa atattttttt aaaaatccac tagaatagaa      360
aatacattat ttagatatac tttatgctga gagtgagtat atatgcttgc cctattttaa      420
cttgtgagaa aaagtgggtat ccttgatgac atttagaaat atgggggcta tcttgtttca      480
ttgtgggggt ggggcagaag gagaataaat gcaggatgac cctgttgaag gaatcttagc      540
atggccaaca ggggacgttt ccagtcgatt accaggaaat gcaagccttg gggtttctac      600
tggtgtgggg gctgtcatga actttaaaat ccaaagccta gacaaggaaa agtgtagac      660
caattgaaaa gcaatccagc cctttttttt tttttttttt ttggccttgc acgacattgt      720
taacagaaac catgcctttc aatattagaa ataaatgtga tgatcatgtt aaatgtgaaa      780
aattggaagc cttcagcaaa ataagaattt ttattntttt n      821

```

<210> 213
 <211> 497
 <212> DNA
 <213> Homo Sapien

<400> 213
 acttgacctg attacgccaa gcttgggtacc gagctcggat ccactagtaa cggccgccag 60
 tgtgctggaa ttcgccctta gcgtgggtcgc gcccgaggta caaaacaata gtctaaacta 120
 acacgaactg ttacctgggtc tattaaagga tacacgggtat ccactaaaca gacagatcct 180
 tatttccctg cttgatgttg caaagccctt ggcaaccagg ggcaaagggtc actgggggtt 240
 gactaaactgg ggctgagtgag cagctatgac tgcctctcag atttttgagt tgtttttgaa 300
 attaaaagct tctaaaagtt gcatcaacat cctcctaagc ccccatagga ttgtaacacc 360
 accacaaaag gccaccaaca ctttttaaac aaagtgaata ctgtctgaca ccaatcatct 420
 tgaaaactcc atggcaagtg cattagctat gatttcatca cttacaggta gagaagctta 480
 ctgtctactg gtgtggg 497

<210> 214
 <211> 817
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(817)
 <223> n = A,T,C or G

<400> 214
 ggccttanag ctgctcgncg gccgccatgt gatggatata tgcagaattc gccctttcga 60
 gcggccgccc gggcagggtac tctcagtcac atgcagaaat actttttttt taattaatag 120
 ttacaggctt gttgggtccag tgggatttgg gtaggggggag aaagatacct tctaaaatgg 180
 atcaatagaa ccaaaataat acagcatgtt ctataaccac aaggaaatca aatgatcctg 240
 tcatgattcc agtttagtcat aaccatgtta gcagtgttaa atgcatttta gaaatgggtga 300
 cttctgtggt tttcctagca tttgtctcta acaaatgggtg aaataattac tcatggccct 360
 ctctgccatt gtcttttcatt ttttcacagt gaaattagac ccctttactt caccattctg 420
 ccactgcaaa ttaagtataa agaaaatagc aagagtgtcc acaccagtag acagtaagct 480
 tctctacctg taagtgatga aatcatagct aatgcacttg ccatggagt tcaagatga 540
 ttggtgtcag acagttttca ctttgtttta aaagtgttgg tggccttttg tgggtgggtt 600
 acaatcctat gggggccttan gaggatgttg atgcaacttt tagaagcttt taatttcaa 660
 aacaactcaa aaatctgaag gacagtcata gctgccactc agccccagtt agtcaaacc 720
 cagtgcctt tgcccctggg tgccaagggtc tttgcaacat caagcangga aataaggatc 780
 tgnctgttag tgggataccg ggtatccttt aatagac 817

<210> 215
 <211> 495
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(495)
 <223> n = A,T,C or G

<400> 215
 acttgacctg attacgccaa gcttgggtacc gagctcggat ccactagtaa cggccgccag 60
 tgtgctggaa ttcgccctta gcgtgggtcgc gcccgaggta catgctgact tcttgggtatc 120
 ttttaaggcc taattttccc ttccttgaga ttactgtagt gtgttccagc taatttctat 180
 ttggaacga gttggaacag ctgaaaacta ggtattattg aaggcaaagc agcctcacgt 240
 cagtttttta tcagctcatt tgggaagttt tttttttttt ttttttaatt aattagaaag 300
 taggctgggc acggtggctc atgcctataa tcccagcact tggggaggcc gaggatctcc 360
 tctctggttg atcacttgag ggcaggagtt aagagaccat cctggccaac atgatgaaac 420
 cctgtctcta ctaaaaatac aaaaagtagc tgggcgtggt ggcatactct tacaatccca 480
 gctacttggt aggc 495

<210> 216
 <211> 823
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(823)
 <223> n = A,T,C or G

<400> 216
 gggccctcaga gcatgctcgn cggccgccag tgtgatggat atctgcagaa ttcgcccttt 60
 cgagcggccg cccgggcagg tacttttttt tcttttttta catctgattt taatgcttcg 120
 ttaacttcaa aagggaactgg tagagtccag aagggtgagct gttgtttttc taaacctctt 180
 cccaggaagg ggacattgac acttgaattt ttgtcacctt ttccctcatt agaaggaaag 240
 tagaaagcct tactgttaga tttttaaaaa aaaatccatc tcaccccata ttggctctta 300
 atagtatag actaattaac ctaagctacc tttaacaacg tagaatttag atgggttcat 360
 atatgtgaga aaaacctgaa tataggacag gggctcctact tttttcccca cctctgtcgc 420
 ccaggctaga gtatagtggg gtgatcttgg cccactgcaa cctctgtctc ctaggttcaa 480
 gtgattctcc tgcctcagcc tcccaagtag ctgggattgt aagagtatgc caccacgcc 540
 agctactttt tgtattttta gtagagacag gggttcatca tgttgccag gatggtctct 600
 taactcctgc cctcaagtga tccaccagag aggagatcct cggcctnccc aagtgtctgg 660
 attataggca tgagccaccc gtgcccagcc tactttctaa ttaattaaaa aaaaaaaaaa 720
 aaaaacttnc caaatgagct gatnaaaac tgacgtgang ctgctttgcc ttcaataata 780
 cctagttttc actggtccaa ctcgtttcca aatagaaatt acg 823

<210> 217
 <211> 827
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(827)
 <223> n = A,T,C or G

<400> 217
 nnnnnnnngc ctntnnagca tgctcgacgg cggccatgtg atggatatct gcagaattcg 60
 ccctttcgag cggccgcccg ggcagggtact gtatcattgg cagatgtgac gtcaccgaca 120
 accagagtga agtgccggac aaaactgagg attacctgtg gctgaagtgt aaccaagtgt 180
 gttttgacga cgatggcacc agctccccac aagacaggct cactctctca cagttccaga 240
 agcagttggt ggaagactat ggcgagtccc actttacggg gaaccagcaa cccttcctct 300
 acttccaagt cctgttcctg acagcgagc ttgaagcagc agttgccttt cttttccgca 360
 tggagcggct gcgctgccat gctgtccatg tagcactggg gctgtttgag ctgaagctgc 420
 ttttaaagtc ctctggacag agtgctcagc tctcagcca cgagcctggg gacctcctt 480
 gcttgccggc gctgaacttc gtgcccgtcc tcatgtgta cctcggccgc gaccacgcta 540
 agggcgaatt ccagcacact ggcggccggt actagtggat ccgagctcgg tacciaagctt 600
 ggcgtaatac tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca 660
 caacatacga gccggaagca taaagtgtaa agcctggggg gcctaataag tgagctaact 720
 cacattaatt gcgttcgct cactgcccgc ttttcaatcg ggaaacctgt cgtgccagct 780
 gcattaatga atcggnaaac gccccggan aagcggtttg cgtattt 827

<210> 218
 <211> 498
 <212> DNA
 <213> Homo Sapien

<400> 218
 cacttgacct gattacgcca agcttggtag cgagctcgga tccactagta acggccgcca 60
 gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtactttttt tttttttttt 120
 taattccac aacaacccat ttcaaaatga gaaaactagg ttgagtgact tgtccacagt 180

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| tccaaagcta | ataaaaaatga | tgaggcatat | ttctcttctg | ggcccactgt | attcagttct | 240 |
| ttgttcttta | cactgagtg | cgaaaaaaaa | aaatcagact | attttgattc | tagaaagtga | 300 |
| gataattgaa | aatgttaaca | tatttctcca | aaactgatca | gactgtggag | tctgtcactt | 360 |
| ttttggtata | ataaaggagt | ttgaagaaac | aaatgacatc | attcctgatg | atggtagccc | 420 |
| actccaacaa | aggcgtatat | atgtaggcaa | gtttgaagat | atctataaga | gcattaaaag | 480 |
| gcaagtgcac | cattgtgg | | | | | 498 |

<210> 219
 <211> 818
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(818)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| <400> 219 | | | | | | |
| ggcctntnga | gctgctcgac | ggccgccatg | tgatggatat | ctgcagaatt | cgcccttagc | 60 |
| gtggcgcggc | cgaggtacct | agaaaacaga | aacttgagta | gacatggtaa | tgaccagaaa | 120 |
| aggctatctt | tatacatctt | ttttgctacg | cttcaaattc | atgtcaccta | aaagtgtgta | 180 |
| agtgcacaaa | acaaatctac | ttaactgaaa | attattttca | atgaatggga | tgtttagaac | 240 |
| tctgtgaggg | tttttaaggt | cttttcgaat | agcaaattct | aatgaggcct | ttttaagttg | 300 |
| gcaattttaa | ctcatacaag | aaataaaaaac | tcaccagtgt | ggctgggcag | aatatatata | 360 |
| ttttctcaaa | tattgtttgt | ttgttttttc | cctgcactgt | atccatggtc | ccatgatgaa | 420 |
| actgttatat | tgctgatata | tttattggaa | tatgtggggc | aacttccttt | ccactcaaca | 480 |
| tatggattgg | tagtttaaaa | taattccttt | ctattaagca | aatgtgtggc | taaggcacat | 540 |
| ttaaatagcc | cattaaacca | atgagatgac | aatgtgttac | cctcagagaa | agcttaattt | 600 |
| ttggagtaat | caattacaca | tatcacagaa | tgtctcatga | gaacattttt | ggctaggtct | 660 |
| accaattttat | catgcaataa | attatagatt | ttcatttgag | gcaaagatgc | tgattcatca | 720 |
| ttagtaacat | ggtcacaaat | aatcattttat | tttatttttg | taacatctgt | ctttcctgtg | 780 |
| gggaaactta | ctatatgctc | tacgttaatt | aaattaaa | | | 818 |

<210> 220
 <211> 497
 <212> DNA
 <213> Homo Sapien

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 220 | | | | | | |
| cacttgacct | gattacgcca | agcttggtac | cgagctcgga | tccactagta | acggccgcca | 60 |
| gtgtgctgga | attcgccctt | tcgagcgggc | gcccgggcag | gtacagccat | gaaattgttg | 120 |
| ctactcatag | aaagtcttag | tatagtttgg | tttaaacatt | ttaaaattgc | aaataaatat | 180 |
| agatagataa | tatcatgatg | agaaggtcac | gggaagcctg | gagatttcag | gggtgctctt | 240 |
| cataattgga | gcgagaatca | tgtaacagtt | aagaaactaa | actcttgagc | cttcatagtc | 300 |
| tttgctttct | ccccatttat | ttatctgata | ttatataccc | tctttaatta | tagactggac | 360 |
| tgaaatattt | tatttttggt | ttattataaa | aaatcctact | cgtctttaac | atgttctctt | 420 |
| aaagagtgtt | tcatatataa | atactttccc | cccaaaatat | aaagaggcta | accactatag | 480 |
| tattgaaaga | ttgaaag | | | | | 497 |

<210> 221
 <211> 831
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(831)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 221 | | | | | | |
| cnnnannggg | ccntnanagc | atgctcgacg | gccgccatgt | gatggatata | tgagaatttc | 60 |
| gcccttagcg | tggtcgcggc | cgaggtacaa | tgaaagtatg | agctacctct | ctgaagtctg | 120 |

```
gaaaccttga gaggattaag gttacatgca taaaatcttt aaaatggaag tgtcattaca 180
tggtaaacca attcaaatta aaaataatct catgctgtga aagcaaaata tataactggc 240
ttaccattc ataggttaatt gcacgtcttt gttacatctc aatagtttct ttgtatttgt 300
tgcaatcacc ctcttcttcc tcaacactct tttctacctc catgtaactg ctgttgtgaa 360
ttctttataa tattctcatc aatgttttaa gatgaagttt aaagtgtcta caaaggaagc 420
attttaactc ctcttagaac tgagccttta aatttggttt tagacaccct aggtctttct 480
ttcaatcttt caatactata gtgggttagcc tctttatatt ttggggggaa agtatttata 540
tatgaaacac tctttaagag aacatgttaa agacgagtag gattttttat aataaaacaa 600
aaataaaata tttcagtcga gtctataatt aaagagggtg tataatatca gataaataaa 660
tggggagaaa gcaaagacta tgaaggctca agagtttagt ttcttaactg gtacatgatt 720
ctcgctncaa ttatgaaaga gcaccctgaa atctncangc ttnccgtagc cttctcatca 780
tgatattatc tatctatatt tattgcaatt ttaaaatggg taaaccaaac n 831
```

<210> 222

<211> 497

<212> DNA

<213> Homo Sapien

<400> 222

```
cacttgacct gattacgcc aagcttggtac cgagctcgga tccactagta acggccgcc 60
gtgtgctgga attcgccctt agcgtgggtcg cggccgaggt actctttctc tcccctcctc 120
tgaatttaatt tctttcaact tgcaatttgc aaggattaca catttcactg tgatgtatat 180
tgtgttgcaa aaaaaaagtg tctttgttta aaattacttg gtttgtgaat ccatcttgct 240
ttttcccat tggaactagt cattaaccca tctctgaact ggtagaaaaa catctgaaga 300
gctagtctat cggcatctga caggtgaatt ggatgggtct cagaaccatt tcaccagac 360
agcctgttcc catcctgttt aataaattag tttgggttct ctacatgcat aacaaaccct 420
gctccaatct gtcacataaa agtctgtgac ttgaagtta gtcagcacc ccacaaact 480
ttatttttct atgtgtt 497
```

<210> 223

<211> 822

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(822)

<223> n = A,T,C or G

<400> 223

```
gggcctnaga gctgctcnc ggcgcctatg tgatggatat ctgcagaatt cgcccttcga 60
gcggccgccc ggccaggtac tttattttca aaaaactcat atgtcgcaaa aaacacatag 120
aaaaataaag tttggtgggg gtgctgacta aacttcaagt cacagacttt tatgtgacag 180
attggagcag ggtttgttat gcatgtagag aaccctaaact aatttattaa acaggatgga 240
aacaggctgt ctgggtgaaa tggttctgag aaccatccaa ttcacctgtc agatgccgat 300
agactagctc ttcagatgtt tttctaccag ttcagagatg ggttaatgac tagttccaat 360
ggggaaaaag caagatggat tcacaaacca agtaatttta aacaaagaca cttttttttt 420
gcaacacaat atacatcaca gtgaaatgtg taatccttgc aaattgcaag ttgaaagaat 480
taaattcaga ggaggggaga gaaagagtac ctcgccgcgc accacgctaa gggcgaattc 540
cagcacactg gcggccgtta ctagtggatc cgagctcggt accaagcttg gcgtaatcat 600
ggatcatagct gtttctgtg tgaaattgtt atccgctcac aattccacac aacatcagag 660
ccggaagcat aaagtgtaaa gcctgggggtg cctaataagt gagctaaact acattaattg 720
cgttgcgtc actggccgct tttcagtcng gaaacctgtc gtgccagctg cattaatgaa 780
tcggccaacg cgccgggaga ngcngnttgc gtattgggcc cn 822
```

<210> 224

<211> 494

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(494)

<223> n = A,T,C or G

<400> 224

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cncttgacnt | gattacgcca | agcttggtac | cgagctcgga | tccctagtaa | cggccgccag | 60 |
| tgtgctggaa | ttcgccctta | gcgtggtcgc | ggccgaggta | cttttttttt | tttttttaac | 120 |
| caactcaata | tgtgtttgat | gatagtgaat | tgataaaacc | cgaagctttt | ccctgtaaat | 180 |
| cttacatctt | tgccttttaa | gaatgggtta | caaccatcac | tagatcacag | tagtgccata | 240 |
| tgaagggtta | gaaccgtagg | agaggctctc | atgctgtaaa | taatgttgca | ggctaataac | 300 |
| ctttcatcac | ttcctttgtg | cgcttcctgc | cttaagtgc | aagtagcaac | atggcttggt | 360 |
| tccctgtgc | agcatcagct | tatgctgcca | caagtcagtt | tgaccctag | gtgccagga | 420 |
| gctagtatcc | ttagatcttt | ctatcgctaa | cttaattctc | ttcgttattt | atctgaccct | 480 |
| ctaactccat | gtct | | | | | 494 |

<210> 225

<211> 822

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(822)

<223> n = A,T,C or G

<400> 225

| | | | | | | |
|-------------|-------------|------------|------------|------------|-------------|-----|
| gggccttnga | gctgctcgnc | ggccgccagt | gtgatggata | tctgcagaat | tcgcccttcg | 60 |
| agcggccgcc | cgggcaggta | ctttaatttt | gcttgttcaa | atgatctaca | cttacatttt | 120 |
| gcaaatcttt | tttttttaaa | tttttaaat | ttatatTTTT | tttccagcca | actcaaggcc | 180 |
| aaaaaaaaatt | tcttaataata | gttattatgc | gaggggaggg | gaagcaaagg | agcacaggta | 240 |
| gtccacagaa | taagacacaa | gaaacctcaa | gctgtgaggt | caatttgtaa | ttaaaagaat | 300 |
| actaagatta | gatgaacaca | acactcagaa | atactctagg | agagctgaaa | aagaaggaaac | 360 |
| agatgttaac | aaaacaaatt | aaggctgctg | gggaacctga | gtccatgtta | agcttggtgt | 420 |
| gactgtaaag | aatttttttt | tttaatgcaa | gttagacatg | gagttagagg | gtcagataaa | 480 |
| taacgaagag | aattaagtta | gcgatagaaa | gatctaagga | tactagctcc | tgggcaccta | 540 |
| gggtgcaaac | tgacttggtg | cagcataagc | tgatgctgca | caggggaccc | aagccatggt | 600 |
| gctacttgct | acttaaggca | ggaagcgcac | aaaggaagtg | atgaaagggt | attagcctgc | 660 |
| acattattta | cagcatgaga | gcctctccta | cggttctcaa | ccttcattag | gcctactgtg | 720 |
| atctantgat | ggntgtaccc | attcttttaa | ggcaaagatg | taaggattta | cagggaaaag | 780 |
| cttcgggttt | tatcaattca | ctatcatcaa | acacatattg | ng | | 822 |

<210> 226

<211> 498

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(498)

<223> n = A,T,C or G

<400> 226

| | | | | | | |
|------------|------------|-------------|------------|-------------|------------|-----|
| anntaaacta | tgacctgatt | acgccaaactt | ggtaccgagc | tcggatccac | tagtaacggc | 60 |
| cgccagtgtg | ctggaattcg | cccttttcgag | cgccgcgccg | ggcaggtagc | ctctcatata | 120 |
| tgcaaacaaa | tgacactag | gcctcaggca | gagactaaag | gacatctctt | ggggtgtcct | 180 |
| gaagtgattt | ggacccctga | gggcagacac | ctaagtagga | atcccagtg | gaagcaaagc | 240 |
| cataaggaag | cccaggattc | cttgatgaca | ggaagtgggc | caggaagggtc | tggtccagct | 300 |
| cacatctnat | ctgcatgcag | cacggaccgg | atgcgcccac | tgggtcttgg | cttccctccc | 360 |
| atctttctca | gcagtgtcct | tggtgagcca | tttgcatcct | tggtccagg | tggtccctc | 420 |
| agtctggact | ctaccacttg | ggtctccaga | ttttctgtta | cgtccttggt | ggtcaggata | 480 |
| tttctggaag | tcactccg | | | | | 498 |

<210> 227

<211> 815
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(815)
 <223> n = A,T,C or G

<400> 227
 gggcctctna agctgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
 cgtggctcgc gccgaggtac attgatgggc tggagagcag ggtggcagcc tgttctgcac 120
 agaaccaaga attacagaaa aaagtccagg agctggagag gcacaacatc tccttggttag 180
 ctcagctccg ccagctgcag acgctaattg ctcaaaactc caacaaagct gccagacca 240
 gcacttggtg tttgattctt cttttttccc tggctctcat catcctgccc agcttcagtc 300
 cattccagag tcgaccagaa gctgggtctg aggattacca gcctcacgga gtgacttcca 360
 gaaatcctt gacccacaag gacgtaacag aaaatctgga gacccaagtg gtagagtcca 420
 gactgaggga gccacctgga gccaggatg caaatggctc aacaaggaca ctgcttgaga 480
 agatgggagg gaagccaaga ccagtgggc gcattccggtc cgtgctgcat gcagatgaga 540
 tgtgagctgg aacagacctt cctggcccac ttctgatcac aaggaatcct gggcttctt 600
 atggcttgc ttccactggg attcctactt aggtgtctgc cctcaggggt ccaaatcact 660
 tcaggacacc ccaagagatg tccttttagtc tctgctgagg cctantctgc atttggttgc 720
 atatatgaaa aggtacctgc ccgggccggc cgttcnaang gcgaatttca gcacactggc 780
 ggncgntact agtggatccc aactcggtag caagc 815

<210> 228
 <211> 512
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(512)
 <223> n = A,T,C or G

<400> 228
 annnnntttn acctannact atgacctgat tacgccaaact tggtagcgag ctccggatcca 60
 ctagtaacgg ccgccagtgt gctggaattc gccctttcga gcggccgccc gggcaggtac 120
 taggtttgca aaaccaatag catgcacatg tgttgggctg aggttcatgt gtcagagact 180
 cagttgtaga aggaactttg aatctggcag gcacttaact gtggctgctc agaactaatg 240
 tatctggggc tgcttgagca ggggctgagg tcagaggcag ggagtgaact ctccatcatc 300
 cttgactcag acccagctcc gcaggagctc catgggtcatc cctggagctc atgtggagtg 360
 caaggtccgg gagtgggggc gctgacagaa acaaatctgg ggggatcagc cagggtcagc 420
 aggggacaga gatcatgtct tttagaagaa tgtgggcttc ctgacctata gaagggcagc 480
 tgttcacccc ctgcagatga tagcagggat ng 512

<210> 229
 <211> 815
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(815)
 <223> n = A,T,C or G

<400> 229
 gggcctnaga gcatgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
 cgtggctcgc gccgaggtac tttttttttt tttttttttt ttcagagata ggttcttact 120
 atgctgccct ggctggagtg cagtggcttt ctaggggca atcacagctc actgcagcct 180
 ggaactcctt ggctcagcct cctaagtagt tgagactacc aatgcacgcc accatacctg 240
 gccttagata cccctgtat cctggaactc actccttata agagacactg aatgtggaag 300

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| tcttcgcaga | tattaagggc | actgcccagt | tcctgtcttt | gaattattgg | gccaacaaca | 360 |
| gaaagggcgt | cctgaggccc | cagatcatcc | ctgctatcat | ctgcaggggg | tgaacagctg | 420 |
| cccttctata | ggtcaggaag | cccacattct | tctaaaagac | atgatctctg | tccctgctg | 480 |
| accctggctg | atccccccag | atttgtttct | gtcagcgccc | ccactcccgg | accttgcact | 540 |
| ccacatgagc | tccagggatg | accatggagc | tcctgcgag | ctgggtctga | gtcaaggatg | 600 |
| atggagagct | cactccctgc | ctntgacctc | agcccctgct | caagcagccc | cagatacatt | 660 |
| agttctgagc | agccagttta | agtgcctgcc | agattcaaag | ttccttctac | aactgagtct | 720 |
| ctgacacatg | aaccttaagc | ccaacacatg | tgcattgctat | tgggttttgc | aaacctagta | 780 |
| cctgnccggg | cgggccgttc | gaaanggcga | attct | | | 815 |

<210> 230

<211> 502

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(502)

<223> n = A,T,C or G

<400> 230

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|-----|
| tnnanctana | cttgacctga | ttacgccaac | ttggtaccga | gctcggatcc | actagtaacg | 60 |
| gccgccagtg | tgctggaatt | cgccctttcg | agcgcccgcc | cgggcaggta | cacagagatg | 120 |
| cgggtccagct | gcaggctcgt | gtccccgtgg | taggtgccc | tggggctcgat | gccatgttca | 180 |
| tcaactgatca | cctcccagaa | cttggcaccg | atctggtagc | cacactgacc | agcctggatg | 240 |
| tgacgatttt | ccctcatggg | taaaatttaa | tttttttgct | cgcttcaagg | tatgtatggg | 300 |
| gcaagaaaaat | aagtaatttt | ttttctccgc | aggtcgcagg | ctggaagggt | ggaatgcgcc | 360 |
| ccagaggctg | gagcagcgag | gtgcaaacgc | gacggcagga | aggttctgag | agcccccgct | 420 |
| acctcggccg | cgaccacgct | aagggcgaat | tctgcagata | tccatcacac | tgccggccgct | 480 |
| cgagcatgca | tctagagggc | cc | | | | 502 |

<210> 231

<211> 817

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(817)

<223> n = A,T,C or G

<400> 231

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| nngggcctct | nnagctgctc | gacggccgcc | atgtgatgga | tatctgcaga | attcgccctt | 60 |
| agcgtggctg | cggccgaggt | acgcggggct | ctcagaacct | tcctgccgtc | gcgtttgcac | 120 |
| ctcgtgctgc | cagcctctgg | ggcgcatctc | aaccttccag | cctgcgacct | gcggagaaaa | 180 |
| aaaattactt | attttcttgc | cccatacata | ccttgaggcg | agcaaaaaaa | ttaaatttta | 240 |
| accatgaggg | aaatcgtgca | catccaggct | ggtcagtgtg | gctaccagat | cggtgccaa | 300 |
| ttctgggagg | tgatcagtga | tgaacatggc | atcgacccca | ccggcaccta | ccacggggac | 360 |
| agcgacctgc | agctggaccg | catctctgtg | tacctgccc | ggcgcccgct | cgaaaggcg | 420 |
| aattccagca | cactggcggc | cgttactagt | ggatccgagc | tcggtacca | gcttggcgta | 480 |
| atcatgggtca | tagctgtttc | ctgtgtgaaa | ttgttatccg | ctcacaattc | cacacaacat | 540 |
| acgagccgga | agcataaagt | gtaaagcctg | gggtgcctaa | tgagtgaagt | aactcacatt | 600 |
| aattgcgttg | cgctcactgc | ccgctttcca | gtcgggaaac | ctgtcgtgcc | agctgcatta | 660 |
| atgaatcggc | caacgcgcgg | ggagaggcng | nttgcgatt | ggcgctctt | ccgcttnctc | 720 |
| gctcacttga | ctcgcttgcg | ctcggtcggt | cngcttgccg | cnanccggat | tcagcttact | 780 |
| taaaggcggt | aataccggtt | atccaccaga | attangg | | | 817 |

<210> 232

<211> 481

<212> DNA

<213> Homo Sapien


```

<400> 232
actatgacct gattacgcc aagcttggtac cgagctcggg tccactagta acggccgccca      60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacaaattt gttgtgtttt      120
ttatgttcta ataatactga gacttctagg tcttaggtta atttttagga agatcttgca      180
tgccatcagg agtaaaattt attgtggttc ttaatctgaa gttttcaagc tctgaaattc      240
ataatccgca gtgtcagatt acgtagagga agatcttaca acattccatg tcaaatctgt      300
taccatttat tggcatttag ttttcattta agaattgaac ataattattt ttattgtagc      360
tatatagcat gtcagattaa atcatttaca acaaaagggg tgtgaacctt agactattta      420
aatgtcttat gagaaaattt cataaagcca ttctcttgtc attcagggtc agaaacaaat      480
t

```

```

<210> 233
<211> 809
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(809)
<223> n = A,T,C or G

```

```

<400> 233
gggcctctnn agcatgctcg acggccgccca tgtgatggat atctgcagaa ttcgccctta      60
gcgtggtcgc ggccgaggtg caaaagatac tggtcacccc attagagaac tgatttgaag      120
ttactcttcc ctgtgagggc tctgtcatct taactgtatt cacatacttt caactgttcc      180
ccttgctgct aacctcagggt tctttagttc atctatctgg cagagctgat ttggggaaaa      240
caagacaaac cttgtcagggt tttcttaata aataagcagt tgctatgttt caagagtttt      300
agaaatgagc aataatcaag gaagaggaca acgattgcat acgtttataa tatttagaac      360
atcttttgcc acaataaaca ctggaaacca cccacttggt gacaccaaac atttggattt      420
gtatattttg tggcattccc tcaacttaat cctctcatcc ttaaaaattt tcagaaattt      480
ttgcagcaac aaacactgat tgcaacatat gatttagggg agatttatga accatttttt      540
cactgaaata catcaacagg agtgagtagt ctgagtgacc accccagcat ggagaaaaact      600
gtagtttaca gattcttctg gagcattttt atttctagat tgcagtggaa gtctaacccc      660
ccttggagat gtctgcctta aagggtcttt ggccagggtc ctctgtagag ccatagtcca      720
gatctactct atttngtgc tccttacaac atcagaacag caactctcaa tccggatcat      780
cccagaatgc cgctgagtca cagcgtggg

```

```

<210> 234
<211> 482
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

```

```

<400> 234
actatgacca tgattacgcc aagcttggtg ccgagctcgg atccactagt aacggccgcc      60
agtgtgctgg aattcgccct tcgagcggcc gcccgggcag gtactgaaaa gaagatagtg      120
ccatttgaaa caacagatgc atcttttata cattttcaca agttngtttt tcatattttt      180
aaaggcccca tttatctgta acagtgggtat ttttatttag agtatcggct acttaatata      240
tacatgcaac aatatatgct ttaatagtca ttttaacttt angaatattt catnacatta      300
agtggttaag catagcgtta aaagagtgga atataaggaa tannaanntn tngaaaatac      360
gctgctannt tcattngcan actatagtag aatggagatg ccataaaaag tgatcattgc      420
ccaactgaat tcctaccng aactaacatg tgattctcaa gtgggganaa atattattaa      480
aa

```

```

<210> 235
<211> 474
<212> DNA
<213> Homo Sapien

```

<220>
 <221> misc_feature
 <222> (1)...(474)
 <223> n = A,T,C or G

<400> 235
 acttgacctg attacgcca gcttggtacc gagctcggat ccactagtaa cggccgccag 60
 tgtgctggaa ttcgccctta gcgtgggtcg gcccgaggta cattacttgg tgtaacatt 120
 gttggcagtg gtagccctt ttcagaaagc aacttgctgt aagtcagggt gtccgttcca 180
 accttcagct agtgaaaagg tagtaacaaa tggtaacaaa gagaatgatt gtttaaacct 240
 atctgtggac acttaattgca actgtttaaa aatgataatc acgagttatg tagcaacgtg 300
 gaaatatatt tacagaacat taatggagaa gcagggacac gaagtattat atactacagt 360
 tataactcaa cagtcattat atgccggtca tttaccagtc atttaaccag ttcattataa 420
 ctgttttaaaa atatatatgc ttatagtcaa aagctgttgt ggtgttgttg ttgn 474

<210> 236
 <211> 819
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(819)
 <223> n = A,T,C or G

<400> 236
 gggccttnna gctgctcgn cggccgccagt gtgatggata tctgcagaat tcgccctttc 60
 gagcgccgc cggggcagg actttttttt ttttttttt ttttttttt taactttatt 120
 tttattgntg acactattac agatagaatg accacaacca tattaacaaa ccaaaaacct 180
 gtgcacagaa acaagatgaa gaaaatatat caagatgtta aacacactct ttggatgggtg 240
 aaaacatggg tgagtttctc ttctacattt ctgtaacttc aaagtttcta taatgaacac 300
 atttcatata taatggaaat atatgtagta aaggtggact accaaaacac tagaatgatg 360
 acctttcaag gaaaccgaaa caaaataacc ataatcccac aacaaccaca caactatttc 420
 ttgnttttca tctttcttcc catctttgac atttatgcat acttatcact aacaccctaa 480
 taatcacaga ctagtgcaca gatcaagatg ttaacagtta attgttgttg ggtgttggga 540
 atatgtgtga attttcttta ctgaatttcc aaagttttgt atgagtatgt atttatattg 600
 taatggaaaa tacatacata aaattttatta ccaaaacacc aaagattatt taagggaatt 660
 tgagacaaaa tatttaacca aattcccaca atgacaacac tatttttagtt attttccaca 720
 tcttttcatt taagacttta tgcacacata ttttaacactg gtatcacaa cgtgggcact 780
 gaaacaagga tnganggaac nggatcagga tgtagccg 819

<210> 237
 <211> 483
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(483)
 <223> n = A,T,C or G

<400> 237
 agcttgacct gattacgcca agcttggtac cgagctcggg tccactagta acggccgccca 60
 gtgtgctgga attcgccctt agcgtgggtcg cggccgagggt actaagctca gcatgtctca 120
 tgggtcaatta ctgcgtattt ccaaaaaaatg tgtgtgttgg tcttgagaaa attcttttagc 180
 cccttgacac cagaattatc tccactgtag aaaaaataga caattatagt ctaacaggta 240
 aatcacaaaa attcttcagc cacacttcct gggttcaa atgtgttttc tactcagtaa 300
 tattgttaacc ctgggcaagt tatttaacct gtctaagtct cagtttctcc atctgtaaaa 360
 tgaggataat cacaatatct actacataat gttcttctga agatgtaatg agataatcca 420
 tgnaaatat tcanacagca cataggaatg ggtcatttaa tgtttatcat tacttgccca 480
 ttt 483

<210> 238
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 238
gggccentnn agctgctcgn cggccgccag tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg taccattatt ttccattcaa taccatatgt ctgaaaaata 120
ggcaagtaat gataaacatt aaatgaccca ttcctatgtg ctgtctgaat attttacatg 180
gattatctca ttacatcttc agaagaacat tatgtagtag atattgtgat taccctcatt 240
ttacagatgg agaaactgag acttagacaa gttaaataac ttgccccagg ttacaatatt 300
actgagtaga aaaaccacat ttgaaccagg gaagtgtggc tgaagaattt ttgtgattta 360
cctgttagac tataattgtc tattttttct acagtggaga taattctggt gtcaaggggc 420
taaagaattt tctcaagacc aaacaacaca ttttttggaa atacgcagta attgaccatg 480
agacatgctg agcttagtac ctccggcccg accacgctaa gggcgaattc cagcacactg 540
gcggccgtta ctagtggatc cgagctcggg accaagcttg gcgtaatcat ggtcatagct 600
gtttcctgtg tgaaattgtt atccgctcac aattccacac aacatacgag ccggaagcat 660
aaagtgtaaa gcctgggggtg cctaattgagt gagctaactc acattaattg cgttgcgctc 720
actgnccgct ttccagtcgg gaaacctgtc gtgccagctg cattaatgaa tcggncaacg 780
cgccggggag aggcngnttg cgtattgggc gctct 815

<210> 239
<211> 483
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(483)
<223> n = A,T,C or G

<400> 239
actatgacct gattacgcca agcttggtac cgagctcggg tccactagta acggccgcca 60
gtgtgctgga attcggccctt agcgtgggtc cggccgaggt actttttttt tttttttttt 120
ttttttttta gcgagcaagt atggnttatt acggacaaat ggtagaaaaa tggtactaat 180
atccatagat aagttcctta agtcatgtag agagactggt attaaaagt ttgtgcattt 240
ttctattgaa tcaagaacta gctaccagtt acagtgcctt ctaaacacac agttagcttt 300
gctttatcaa taaccaata ataaactagg tcccaatggt tttgtccaca tntagattgt 360
tcaggtgatc aggaactctt ttatttgtgt gctttagctt ttagttcttg gttatatctc 420
caaatacgaa aaagctgaga ggctcctact gccccacaa agaaattaac agcaaacaga 480
ctt 483

<210> 240
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 240
gggccnttna gctgctcgac ggccgccatg tgatggatat ctgcagaatt cggcccttctg 60
agcggccgcc cgggcaggta caaccatcca gcaggcccca gaacagtttt cttctgggct 120
ccaattatga aatgggggtt ggtgtgtgct ggattggctg atatggccag acctgcagaa 180

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| aaacttagca | cagctcaatc | tgctgttttg | atggctacag | ggtttatttg | gtcaagatac | 240 |
| tcacttgtaa | ttattccaaa | aaattggagt | ctgtttgctg | ttaatttctt | tgtgggggca | 300 |
| gtaggagcct | ctcagctttt | tcgtatttgg | agatataacc | aagaactaaa | agctaaagca | 360 |
| cacaaataaa | agagtccctg | atcacctgaa | caatctagat | gtggacaaaa | ccattgggac | 420 |
| ctagtttatt | atttggttat | tgataaagca | aagctaactg | tgtgtttaga | aggcactgta | 480 |
| actggtagct | agttcttgat | tcaatagaaa | aatgcagcaa | acttttaata | acagtctctc | 540 |
| tacatgactt | aaggaactta | tctatggata | ttagtaacat | ttttctacca | tttgtccgta | 600 |
| ataaaccata | cttgctcgct | aaaaaaaaaa | aannnnnaaa | aaaaaaagta | cctcgggcgc | 660 |
| gaccacgcta | agggcgaatt | ccagcacact | ggcggccgtt | actagtggat | ccgagctcgg | 720 |
| taccaagctt | ggcgtaatca | tgggtcatag | ctggttcctg | tgtgaaatgg | tatccgntca | 780 |
| caattncaca | caacatacga | accggaagcc | taaag | | | 815 |

<210> 241
<211> 486
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)... (486)
<223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| <400> 241 | | | | | | |
| agctatgacc | atgattacgc | caagcttggg | accgagctcg | gatccactag | taacggccgc | 60 |
| cagtgtgctg | gaattcgccc | ttagcggccg | cccgggcagg | tacttcccac | cactggaaat | 120 |
| gttagcataa | aagaacttgg | agaggaaaaa | agtattaaca | aaactgcagt | ctgcactctt | 180 |
| taaacctgtt | taaggctctt | catcctgggt | agcaaaaggt | gtgaatgtaa | tgtgatggaa | 240 |
| tttaaaagtt | ttatgagacc | aggcacagtg | gctcacgact | gtaattccag | cagttttagga | 300 |
| agccgaagtg | tgcagatcac | ctgaggtccg | gagaccagcc | tggccaacat | ggtgaaaccc | 360 |
| tgtctctact | agaaatacaa | aaattagcca | ggtgtggtgg | cgggcgcctg | taatcccaac | 420 |
| tactcaggag | gctgaggcta | gagaatcact | tgaaccagc | angcggaggt | tgcggtgagt | 480 |
| cganat | | | | | | 486 |

<210> 242
<211> 481
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)... (481)
<223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| <400> 242 | | | | | | |
| anttgcactg | attacgccaa | gcttggtagc | gagctcggat | ccctagtaac | ggccgccagt | 60 |
| gtgctggaat | tcgcccttcg | agcggccgcc | cgggcaggta | catcagtgtt | cattttatta | 120 |
| tttcttacac | tgtcttcctg | acttacacat | aatattttgc | tagttttaaa | acataagatg | 180 |
| tgataataat | ctaaacagac | caaaggaaat | aaatgaatat | gattaaaaaa | agacagagaa | 240 |
| taagccctgt | ctgatggaaa | gcataacaaa | gcaggtagaa | caactgtcag | gaatgcttga | 300 |
| tccaataaag | ctaggtttgt | gatccacaac | acttcagcat | tttaatgtga | tttttgatgt | 360 |
| tngctttttg | caatgggtgat | tctcagttgc | ctccctcctg | tgtctttaca | agctgaaatc | 420 |
| aagtgaagct | acttctgact | ttttctaaaa | cttaaaccga | acatgaaggt | ctgcgtattc | 480 |
| t | | | | | | 481 |

<210> 243
<211> 824
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)... (824)

<223> n = A,T,C or G

<400> 243

| | | | | | | |
|-------------|------------|------------|-------------|-------------|------------|-----|
| cnanngggccc | tntnnagcat | gctcgacggc | cgccatgtga | tggatatctg | cagaattcgc | 60 |
| ccttagcgtg | gtcgcggccg | aggtacataa | tacttttagat | aaacattttt | agaataactt | 120 |
| tattataact | cgataagcaa | aataatccaa | acctttatac | atttctacaa | ggatagtcac | 180 |
| atatgtcaat | ttttcggttt | cctctcgtgc | ctattttgtc | tcctgagccg | gcccctttcc | 240 |
| agctgacacg | tgtgctccgt | gttctccac | aatagtgtga | cctggcctga | gtccatgccg | 300 |
| ccgtgagcct | cctttctgtg | cttacaacag | cagcctgcct | gatgtcagtt | atggactatt | 360 |
| ctttctttca | gcctcatttc | agggtcctct | gcctcttaga | gctgctgctg | tagcttagct | 420 |
| agagaccgcg | tgtgtttgca | tcattggaaa | gtgccacata | cgtgcacatg | tgaaagaata | 480 |
| cgcagacctt | catgttgggt | ttaagtttta | gaaaaagtca | gaagttagctt | cacttgattt | 540 |
| cagcttgtaa | agacacagga | gggaggcaac | tgagaatcac | cattgcaaaa | agcaaacatc | 600 |
| aaaaatcaca | ttaaaatgct | gaagtgttgt | ggatcacaaa | cctagcttta | ttggatcaag | 660 |
| cattcctgac | agttgttcta | cctgcttttg | ttatgctttc | catcagacag | ggcttattct | 720 |
| ctgtcttttt | taatcatatt | catttatctt | ctttggcttg | tttagattat | tatcacatct | 780 |
| tatgttttaa | aactagcaaa | atattatgtg | taagtcatga | agnt | | 824 |

<210> 244

<211> 483

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(483)

<223> n = A,T,C or G

<400> 244

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| actatgacct | gattacgcca | agcttggtag | cgagctcgga | tccactagta | acggcccgcc | 60 |
| agtgtgctgg | aattcgccct | ttcagagcgg | cgcccgggca | ggtagcggg | ggcagggtgt | 120 |
| ttaatcgctg | ccaagcggga | cttactgcaa | gctatcaa | ctgaggtctt | attttgttga | 180 |
| gtcgaaagtg | aaattttcct | ttggccaacg | tgacagggct | ttgtttgggtg | gtaaaaagg | 240 |
| ttactagaca | cccctcattc | cactgccact | ggaggcgca | tttctcagct | cttgctcttc | 300 |
| aaacctgctg | aaaggaattc | ctagatctaa | acaccagcat | ttgacattgt | gcagcaana | 360 |
| aatgggttat | ganaagccca | gtccgctgct | tgtanggcgg | gagtttgtga | ggcaatatta | 420 |
| tactttgtg | aataaagctc | cggaatattt | acacagggtt | tatggcagga | attcttctta | 480 |
| tgt | | | | | | 483 |

<210> 245

<211> 822

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(822)

<223> n = A,T,C or G

<400> 245

| | | | | | | |
|------------|-------------|------------|------------|-------------|-------------|-----|
| ttgggccc | nnagcatgct | cgacggccgc | catgtgatgg | atatctgcag | aattcgccct | 60 |
| tagcgtggtc | gcggccgagg | tacttcccct | cgaaacataa | tcgggtttgc | aattaagatt | 120 |
| ctctgaactg | gttcagagtc | atcaaaaacc | acaaaaccaa | aatttggaag | ctttccccc | 180 |
| acacccttgg | tattgatgcg | aagtccaca | acgtttccaa | aactcatgaa | gaattccttt | 240 |
| agctcatttt | catcaaatatc | atgtggcaag | ttaccaacaa | aaagtgtgatg | actatctgga | 300 |
| tagcgaatta | ttctacgggt | gtcagagtca | ttctgttcca | tatctcctct | gcctggctctt | 360 |
| ggctctctag | gaggaaaacc | aggtcgttct | ctaggtcggt | gttcacgcac | acgaggtggc | 420 |
| tgagattgaa | cttctgggtt | agcttcgact | cttggctttg | gtgggtcttg | tggcagagaa | 480 |
| acaggttctg | ccggaggagg | agtagtagat | ttctcctcta | gttcttctaa | gttcttctcc | 540 |
| tccacttgtg | gtttcagctc | ttcagtcctt | gtttcagatt | ctgggtcagg | ttcaggttca | 600 |
| tgagaggatt | cttccaaagg | ctcctctatg | ccattagtca | cagggtgagc | ttcatagtaa | 660 |
| ccactgttag | cattttcttg | cacaggttca | ggagatgggt | gnctttcttc | ttggctctct | 720 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tctacttcat | cttctgattc | ttcatcaaag | ttcangctca | gaatcaccaa | acacttnatc | 780 |
| ttcataacga | aacatatcat | tgtgaacata | aaattttatt | gg | | 822 |

<210> 246
<211> 482
<212> DNA
<213> Homo Sapien

| | |
|---|-----|
| <400> 246 | |
| actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca | 60 |
| gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actttttttt tttttttttt | 120 |
| aaccaactca atatgtgttt gatgatagtg aattgataaa acccgaagct tttccctgta | 180 |
| aatcttacat ctttgccctt aaagaatggg ttacaacat cactagatca cagtagtgcc | 240 |
| taatgaaggt tgagaaccgt aggagaggct ctcatgctgt aaataatgtt gcaggcta | 300 |
| aacctttcat cacttccttt gtgcgcttcc tgccttaagt gacaagtagc aacatggctt | 360 |
| gggtcccttg tgcagcatca gcttatgctg ccacaagtca gtttgcaccc taggtgccca | 420 |
| ggagctagta tccttagatc tttctatcgc taacttaatt ctcttcgta tttatctgac | 480 |
| cc | 482 |

<210> 247
<211> 816
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(816)
<223> n = A,T,C or G

| | |
|---|-----|
| <400> 247 | |
| gggccttnga gctgctcgan cggccgccat gtgatggata tctgcagaat tcgccctttc | 60 |
| gagcggccgc ccgggcaggt actttaattt tgcttgttca aatgatctac acttacattt | 120 |
| tgcaaatctt ttttttaaat tttttaaatt ttatatttt tttccagcca actcaaggcc | 180 |
| aaaaaaaaatt tcttaataata gttattatgc gaggggaggg gaagcaaagg agcacaggta | 240 |
| gtccacagaa taagacacaa gaaacctcaa gctgtgaggt caattttgtaa ttaaaagaat | 300 |
| actaagatta gatgaacaca aactcagaa atactctagg agggctgaaa aagaaggaa | 360 |
| agatgttaac aaaacaaatt aaggctgctg gggaacctga gtccatgtta agcttggtt | 420 |
| gactgtaaaag aattttttt tttttaatgc aagttagaca tggagttaga gggtcagata | 480 |
| aataacgaag agaattaagt tagcgataga aagatctaag gatactagct cctgggcacc | 540 |
| taggggtgcaa actgacttgt ggcagcataa gctgatgctg cacaggggac ccaagccatg | 600 |
| ttgctacttg tcaacttaagg caggaagcgc acaaagggaag tgatgaaagg ttattagcct | 660 |
| gcaacattat ttacagcatg agagcctctc ctacgggtct caaccttcat taggcactac | 720 |
| tgngatctag tgatggttg acccattctt taaaggcaaa gatgtaagat ttacagggaa | 780 |
| aagcttcggg ttttatcaat cctatcatca acacng | 816 |

<210> 248
<211> 482
<212> DNA
<213> Homo Sapien

| | |
|---|-----|
| <400> 248 | |
| actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca | 60 |
| gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtactctttg ggcattaatg | 120 |
| ccttctctgt aatttatatc cgtttttgct tggcagtgac ctaccagta attgcatcgt | 180 |
| gtattgccat gaaaggtaaa cacattgtga actgaactta ccaagcagat tctgtgagaa | 240 |
| agcactggtt ggggctgaac actgttgaca catcattttt attggaagag tattaactgg | 300 |
| tgctcttctt gaaacacacc aacccatatt cctctgctcc cccaaagctg tttctgatcc | 360 |
| tgctgggagc aactaactag ttattatgca catctgctcc agaccagct ctttaacttc | 420 |
| atggttttac agcttggttt ttctttttct tttcttttct ttttttttaa aaaagcacct | 480 |
| tt | 482 |

<210> 249

<211> 821
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(821)
 <223> n = A,T,C or G

<400> 249
 ggccctctnag ctgctcgacg gccgccatgt gatggatatt tgcagaattc gcccttagcg 60
 tggctcgccg cgaggtactt tatgaatttg gggtaggttaa agtttgattt ttatcttaaa 120
 catgttttct atgatgaaaa ggaacaaaat tgtaaaaaat gaggatcttc cctctaagg 180
 tttcaaagcg ttagaggaca tgcaattaaa tgttggtaca ccttgaacaa tgagcctctt 240
 gagttttagt gaagggcaga ccggctccat taccaacaac tttggggtag aaagcacagc 300
 tctcctcttt taccagcac aaatgcaatc ctgattataa aactatttgt gtttctaaat 360
 acaaccaaag gaaatcttag agaaacataa attagaaacc tcttttatta aggggaaaca 420
 acaaaaaaag gtgctttttt aaaaaaaaag aaaagaaaag aaaaagaaaa aacaagctgt 480
 aaaaccatga agttaagag ctgggtcttg agcagatgtg cataataact agttagttgc 540
 tcccagcagg atcagaaaca gctttggggg agcagaggaa tatgggttg tgtgtttcag 600
 aagaggcacc agttaatact cttccaataa aaatgatgtg tcaacagtgt tcagcccaa 660
 ccagtgtctt ctacagaaat ctgcttggtt agttcagttc acaatgtgtt tacctttcat 720
 ggcaatacac gatgcaatta ctgggtaggt cactgccaag caaaaaccga agatntaatt 780
 tcccagagaag gcattaatgc ccaaagagta cctgccccg n 821

<210> 250
 <211> 481
 <212> DNA
 <213> Homo Sapien

<400> 250
 acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cgcccgccag 60
 tgtgctggaa ttcgccctta gcgtggctgc ggccgaggta caacattgat gttttaatat 120
 agaatgaagt gcttgctaca cagtcaagta aatcaacata tccattacca cacacacttt 180
 tcttttctga ggagcggtaa gagtacttta attttgagc tattgattaa ttaaaaaaca 240
 cagttgtttt cagcatttcc tagttacagt agtgcatagg aaattccatt ctaaacaag 300
 aagtaattaa tgaaataaca acacacctta acattttaca ttgatagggt acagtttaca 360
 aggtgctttc acatacatta tttcatttga ttcttacaac aagcagaaaa aacagtggga 420
 aagatttttt ttttcaggct tacaatgagt attttcaggc caatgggcag ttaacacaag 480
 g 481

<210> 251
 <211> 803
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(803)
 <223> n = A,T,C or G

<400> 251
 gggccttnna gctgctcgnc ggccgccagt gtgatggata tctgcagaat tcgccctttc 60
 gagcgggccg ccggcaggta cactaaatta gaatatTTTT aaagtatgta acattcccag 120
 tttcagccac aatttagcca agaataagat aaaaacttga ataagaagta agtagcataa 180
 atcagtattt aacctaaaat tacatatattg aaacagaaga tattatgtta tgctcagtaa 240
 ataattaaga gatggcattg tgtaagaagg agccctagac tgaaagtcaa gacatctgaa 300
 tttcaggctg gaaaactatc agtatgatct cagcctcagt tctcttgtct gtaaaatgga 360
 agaactggat taggcagttt gtaagattcc tcctaacttt cacagtcgat gacaagattg 420
 tctttttatc tgatatattg aagggtatat tgctttgaag taagtctcaa taaggcaata 480
 tatttttagg catctttctt cttatctctg acagtgttct taaaattatt tgaatatcat 540
 aagagccttg gtgtctgtcc taattccttt ctcactcacc gatgtgtaat acccagttga 600

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| atcaaactgt | caacctacca | aaaacgatat | tgtggccttat | gggtattgct | gtctcattct | 660 |
| tggtatattc | ttgtgttaac | tgcccatggc | ctgaaaatac | tcattgtaag | cctgaaaaaa | 720 |
| aaaatctttc | ccactgggtt | ttctgcttgg | tgtaagaatc | aaatgaaata | tggaatgtgaa | 780 |
| agcccttgta | actgtaccta | tcn | | | | 803 |

<210> 252
<211> 500
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

| | |
|-------------|-------------|
| <400> 252 | |
| tacnccaann | tttgacctga |
| ggccgccagt | gtgctggaat |
| aagtgggtgt | aatgacctac |
| aagatcagct | tgattaaaaa |
| cagtttaact | cttctcgtgt |
| anatggggaa | aattaaaaagc |
| tcttaaccaa | accctggact |
| tggnrtggtaa | agtcantttg |
| ttcccacctt | ggatctggcn |

<210> 253
<211> 831
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(831)
<223> n = A,T,C or G

| | |
|------------|-------------|
| <400> 253 | |
| gnnnnnnnnn | gnnnnnnnnn |
| gtgatggata | tctgcagaat |
| tgagcctagg | gtagggggcac |
| gaaaggggaa | aaagtgtata |
| ttcagatatt | tcataatttc |
| atgcagatac | aatggttggt |
| actgacttaa | caacattgct |
| gtgtttgttg | agaatccatg |
| atgtttccca | tctgatttta |
| aagagttaaa | ctgggttcat |
| tcaagctgat | cttaatgtat |
| attaacacca | cttcttttca |
| cacactggcg | gcccgttact |
| gtcatagctg | tttcctgtgt |

<210> 254
<211> 514
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(514)
<223> n = A,T,C or G

<400> 254
cacttgacnt gatcgccaac ttggtaccga cntcgnntcc attattaccg gacacttgac 60
tgatacgcca ncttgggtacc gactcggacc actagtaacg gncgccagtg tgctggaatt 120
cgcccttgag cggccgcccgg ggcaggtacc tctaatagcag gctaataaat ttaagctaatt 180
tatttatgct acctgtgctg tgggtggttc ctatcagcag ccaaatataa cctcacagtt 240
gttttgctgt ttttgctttc acaaaagagc tattaaccaa cttaaaaatg ttttttgatt 300
gaaggatgct taggggatga gaggatatca acaatataag cccatgccaa atccccattt 360
cttatcatta aaactgacct gacattaaag caatgcttaa ttttttacca taagagttaa 420
attttgagat tataatttta aagtgtaaaa tatttacact taaattacac ttataatttt 480
aaagtgtata atatttacac agattaaaaat aaaa 514

<210> 255
<211> 830
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(830)
<223> n = A,T,C or G

<400> 255
nnnnnngncn nnnnnnannn nnnnnnnant gggcctctnn agcntgctcg acggccgcca 60
tgtgatggat atctgcagaa ttcgccctta gcgtgggtcg ggcggaggta cttttttttt 120
ttttccagat gaagtcttgc tctgttgccc aggctggagc gcagtggcac aatctcagct 180
cactgaaacc ttcgccccct gggctcaagc tagccagtct ttagtaaac atttagtcaa 240
caaatctgca attataacgg aggtttgatt tttgttgttt ttgtttgttt ttaagtcact 300
ctgtgtttgt aatatcaatt tacttttcaa gttagaatg ttttgcttca ttgtttccca 360
tattttattt taatctgtgt aaatattata cactttaaaa ttataagtgt aatttaagt 420
taaatatttt acactttaaa attataatct caaaatttca ctcttatggt aaaaaattaa 480
gcattgcttt aatgtcaggt cagttttaat gataagaaat ggggatttgg catgggctta 540
tattgttgat atcctctcat cccctaagca tccttcaatc aaaaaacatt ttaagttgg 600
ttaatagctc ttttgtgaaa gcaaaaacag caaaacaact gtgaggttat atttggtgct 660
tgataggaaa ccaccacagc acaggtagca taaataatta gcttaaatat attagcctgc 720
attagaggta cctgcccggg cngggcgtca agggcggaatt ccagcacact ggcggccggt 780
ctagtggatc cgactcggtc cagcttgctg aatcatggtc atagctgttg 830

<210> 256
<211> 524
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(524)
<223> n = A,T,C or G

<400> 256
cnnnnnnnna ncntnanacn nnnnnntngn nnnnnnagann nnnnnnnnnn nnnnnnnnan 60
actatgactg attacgcan cttgggtacc actcggatcc actagtaacg gccgccagtg 120
tgctggaatt cgcccttagc gtgggtcgcg ccgaggtaca ttacttggtg ttaacattgt 180
tggcagtggt agcccttttt cagaaaagcaa cttgctgtaa gtcagggtgt ccgttccaac 240
cttcagccag tgaaaaggta gtaacaaatg gtaaacaaaga gaatgattgt ttaaacctat 300
ctgtggacac ttaatgcaac tgttttaaaa tgataatcac gagttatgta gcaacgtgga 360
aatatattta cagaacatta agtggagaaa gcaggacacg aaagtatat tatactacag 420
ttataactca acagttcatt tatatgctgn tcatttaaca gttcatttaa acagttcatt 480
ataactgttt aaaaatatat atgcttatag tcaaaagctg ttgg 524

<210> 257
<211> 814
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(814)
<223> n = A,T,C or G

<400> 257
ntgggcctct agaagcatgc tcgagcggcc gccagtgtga tggatatctg cagaattcgc 60
ccttgagcgg ccgcccgggc aggtactttt tttttttttt tttttttttt tttgatattt 120
atttttaact ttatttttat tgntgacact attacagata gaatgaccac aaccatatta 180
acaaacaaa aacctgtgca cagaaacaag atgaagaaaa tatatcaaga tgttaaccac 240
actctttgga tgggtgaaaac atgggtgagt ttctcttcta catttctgta acttcaaagt 300
ttctataatg aacacatttc atatataatg gaaatatatg tagtaaagggt ggactaccaa 360
aacactagaa tgatgacctt tcaaggaaac cgaaacaaaa taaccataat cccacaacaa 420
ccacacaact atttcttgct ttctcatctt cttcccatct ttgacattta tgcatactta 480
tcactaacac cctaataatc acagactagt gcacagatca agatgttaac agttaattgt 540
tgttggggtgt tgggaatatg tgtgaatttt ctttactgaa tttccaaagt tttgtatgag 600
tatgtattat atttgtaatg gaaaatacat acataaaaatt tattaccaa acaccaaaga 660
ttatttaagg aatttgagac aaaatattta accaaattcc cacaatgaca acactatttt 720
agttattttc cacatctttt catttaaaga ctttatgcac acatatttaa cactgntatc 780
acaagcgtgt gcactgnaac aggattgagg aaan 814

<210> 258
<211> 474
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 258
acagctatga cctgattacg ccaagcttgg taccgagctc ggatccacta gtaacggccg 60
ccagtgtgct ggaattcgcc cttagcgtgg tcgcggncga ngtacattat ttggaggact 120
taaaatctgn atgtggacat ggtcccaact tantgtccgt taactagtta tccaaattgt 180
aanagctaca gaaagcccag ttgaggggta antgtgcctg gntcacacag cctgcaccct 240
gtcacctcgg caatgagcca gtgtggggca ctggggactt ctaacccttg gattgctctt 300
tttgacctgt gcataccttc taattgnaaa atatatattca gaccgagagt acntgcccgg 360
gcgggcncctc aaaagggcga attctgcaaa tatccatcac atggcgggccg ntngagcatg 420
catctaggag ggcncaatc ccctatagng agtngtatta caattcactg gcnc 474

<210> 259
<211> 809
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(809)
<223> n = A,T,C or G

<400> 259
ntgggcccct agangcatgc tcgncggccg ccatgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtactcac ggtctgaaat atattttaca attagaagggt 120
atgcacaggt caaaaagagc aatccaaggg ttagaagtcc ccagtgcccc aacttggtc 180
attgccgagg tgacaggggt caggetgtgt gagccaggca cacttaccct tcaactgggc 240
ttctgtagct ttacaatttg gataactagt tagcggacag tagttgggac atgtcacata 300
cagattttgag tcctccaata atgtacctcg gccgcgacca cgctaagggc gaattccagc 360
aactggcgg ccgttactag tggatccgag ctccgtacca agcttggcgt aatcatggtc 420
atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca tacgagccgg 480
aagcataaag tgtaaagcct ggggtgccta atgagtgage taactcacat taattgcgtt 540

```

gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg      600
ccaacgcgcg gggagaggcg gtttgcgtat tgggcgctct tccgcttcct cgctcactga      660
ctcgtctgcg tcggtcgttc ggctgcggcg agcgggtatca gctactcaaa ggcggttaata      720
ccgttatnca cagaatcang ggatacgagc gaaagaacat gtgagcaaaa ngccacaaaa      780
ggccaggaaac cgtaaaaagg ccgcgtttg      809

```

<210> 260
 <211> 713
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(713)
 <223> n = A,T,C or G

```

<400> 260
ctctttaaac gccagctcga ntccganntc tatecntgac aannnnngtn ccggngctgga      60
attcgncttt tcgagcggcc gcccgggcag gtacttgagt tcatgggcat ctctcccgcc      120
gcctctcagc ctatctgcac catgtctcac acgttcagtt ccagctctta ccgttttgaa      180
ggcgacagtg ggcaagaagt cctgggcagc acaagaaagt caatcacgtt gagacagaga      240
gagcaggaga ggaagtgggc cccagtagaa gtgggcgaga gagcgttggg tgggaaacgtg      300
gcacgagaga gagaaattat gagattgaga gagagagaga gagagagaga gagagagaga      360
gaaagagana ganagaggga aaganaaaga gacagagaaa agaaactatt gttggttaaa      420
atgccagcgg aaagtccatg ggggtgaatg agtccggcaa tggncangga gttagcagct      480
tggcgtagtg tctttcactg ntttggtgtg cttgagaata gcattcnacn ccgactgtgg      540
ttccccanca gacttttagc ngttgcccng ncttgaattg ccggaccaag gttaacatag      600
gcttttcggn tctnaatatt tttggggctn gaatanctcg aaccttttgg gctgggccat      660
ttacccgntn cnnctgggt nnnacatttt tncgtggntaa tcccgccttt tng      713

```

<210> 261
 <211> 722
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(722)
 <223> n = A,T,C or G

```

<400> 261
acgcanttag gtaccgagct cggatcccta gtaacggccg ccagtgtgct ggaattcgcc      60
cttagcgtgg tcgcggcccc aggtactcct cagccatgcc gaaggctcct tccggggact      120
cttcgatggc agacagcagg gcattgtcct tctcattcct caggaagccc tgcagctctt      180
aaatttaagg agttacagaa cggtcgatgc tgnccatcac tgcagctctt ccaaactctt      240
ttatatgaga tgagctctgt cggaaccagt gctcaagttt tccccacccc aaactgcctg      300
aattgaggga tgggggtggg gagaaggaca gagagaagag aaaaagagag aaagaagana      360
aaggaaaaga acaacccctc tgcaagtgtg gatgtgactg aagcactaaa gagtcaaatt      420
aaacaatgaa gattgcaggg tccctttaaa aagggtgcac tgcagncccc ngagcacanc      480
natcccattc gnttgngccg ctncacanat tctagagaan tcnnccatca tgtttgaaan      540
gcncaaaant gatgggannt cccgnntacg cggggactta attctgcctt gggaaatcaa      600
ggaanacttt gnttggangc ggcanttnaa anntggcctt aagaangnng tgngaatttg      660
ttggccaaac nantngaaag gtnttcgggc cgatnggtcc ctgattttta aggatttnaa      720
ng

```

<210> 262
 <211> 705
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature

<222> (1)...(705)

<223> n = A,T,C or G

<400> 262

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| acgcttttaa | cnccagcttg | gtaccgagct | cggatcccta | gtaacggccg | ccagtgtgct | 60 |
| ggaattcgcc | cttgccgccc | gggcaggtag | ctgatatttt | gaacttttaa | ttgctatcaa | 120 |
| atttcagctc | tggttttatg | cattgttgta | atttctcagt | gaatcccagt | gcttctttcc | 180 |
| ttcttgaaaa | atgccatttc | gcccaggcgc | ggtggctcat | gcttgtaatc | ccagcacttt | 240 |
| ggtaggccga | ggtgggtgga | tcagctgagg | tctgtagttc | aagaccagcc | tggctaacat | 300 |
| gatgaaaccc | tgtctctacc | aaaaatacaa | aaaaaaacta | gccaggcatg | gtgttgtag | 360 |
| cctgtaatcc | cagctactca | ggaggctgag | acaggagaat | cgcttgaacc | tgggaggtgg | 420 |
| aggttgcagt | gagccaagat | cgcgccactg | cactncaacc | tgggcaacag | agtgaagactc | 480 |
| catctcaaaa | naannaaaaa | ggaaaatgcc | atttcttggg | cccantgcca | atatgcacca | 540 |
| agaatgttng | taggaactac | tttggctctg | ctgcagaagt | tcttaatcta | gcattaaaaa | 600 |
| tccaacggtt | gatttgatct | cttaaaatgg | ttttcnnant | ttgganctga | aattgagnat | 660 |
| aaattacctt | tgcnnntnaa | ttcaaaaang | tnaacctnnt | tnann | | 705 |

<210> 263

<211> 656

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(656)

<223> n = A,T,C or G

<400> 263

| | | | | | | |
|------------|------------|-------------|-------------|------------|------------|-----|
| acncgcttgt | accgagctcg | gateccctagt | aacggccgcc | agtgtgctgg | aattcgccct | 60 |
| tagcgtggtc | gcggcccgag | gtaccgcggg | ggagaacgcc | agggagctgt | gagagtgtgc | 120 |
| agtcgcgttc | ctgctgtccg | gacacttttt | tcctctactg | agactcatct | ggtagatccg | 180 |
| caggccagtc | ctcccagggg | ctgaagttgt | gaaatatggg | ttttctaaga | agattaatct | 240 |
| atcggcgtag | accaatgata | tatgtagaat | cttctgagga | gtccagtgat | gagcaacctg | 300 |
| acgaagtgga | atcaccaact | caaagtcagg | attctacacc | tgctgaagag | agagaggatg | 360 |
| agggagcatc | tgcagctcaa | gggcaggagc | ctgaagctga | tagccaggaa | ctggttcagc | 420 |
| caaagactgg | gtgtgagctt | ggagatggtc | ctgataccaa | gagggtnatg | ctgcgaaatg | 480 |
| aagagcagat | gaaactgccc | gnagaaggcc | agacctgann | cgatagcagg | acagttcccc | 540 |
| gaaactggtg | tagcgcgaat | gtctgtgtca | gagtggcctg | ccaatcaagg | agtgaaccct | 600 |
| gggaataagc | atccagctta | aagannccct | gangggttagt | gtctngtgaa | ttncct | 656 |

<210> 264

<211> 752

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(752)

<223> n = A,T,C or G

<400> 264

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|-----|
| ggnttgaaang | tatacgactc | nctanggcga | attgggccct | ctagatgcat | gctcgagcgg | 60 |
| cccgccagtg | tgatggatat | ctgcagaatt | cgcccttagc | gtggtcgcgg | ccgaggtacc | 120 |
| tttgataatt | cctagacctc | tatttttcatt | ctgtgtatta | atgtgaataa | cagatggata | 180 |
| ttttaaatatt | taaggcagat | ggtaaaacttt | cctatagggtc | ttgtgagact | tcgtcttata | 240 |
| ggctgaacac | cattcacaaa | atgtaataat | gcttcattcc | ttcagggtga | ggtaaaagaac | 300 |
| ttgagcaact | ggattagcaa | agctgcaaag | aatgaaatgt | ggcctaagat | gtaattatgt | 360 |
| tctctgccct | tcctttgggc | cagggtagtt | ttgcaactga | cacaatggaa | aataggccat | 420 |
| aaagcctgaa | aataaaatgt | tctaaacccc | aatctcacag | cacttttagta | ggctttttcac | 480 |
| taggcattctt | ttaagtattt | tcaacaaaaa | actaatgaag | ctaccacttc | aaaagagctt | 540 |
| caaggaaaag | ctctgctttc | ttataaaaatc | tttttgagac | agagtttccg | ctcttgtcag | 600 |
| cacaggctgg | agtgcattgg | ccgtgatctc | gactnaaccg | naaccttcgg | cctgctgggt | 660 |

tcaagtgatt ctctagncct caagcttctg agtaggttgg gattacaggc gcccggncaa 720
ccacacctgg gctaaatttt ggatttctan gn 752

<210> 265
<211> 747
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(747)
<223> n = A,T,C or G

<400> 265
gngntttcnc nnnngcgtct anagcatgct cgagcggccg ccagtgtgat ggatatctgc 60
agaattcgcc cttagcgtgg tcgcggccga ggtaccttgg atnattccta gacctctatt 120
ttcattctgt gtattaatgt gaataacaga tggatattgt aatatttaag gcagatggta 180
aactttecta taggtcttgt gagactncnt cttataggct gaacaccatt nacnanntgt 240
antaatgctt nattccttca ggcngaggtn nanaacttga gcacctggat tagcagcagc 300
tgcgaaagaat gaaatgcngc ctaacatgta attatgnatc tctgnccttc ctttgggcca 360
gggtagtnat gcncatagaca cantggatga tangccatna agcctgannn tagnaatgatc 420
taaaccncaa tctnncagca ctttattagg ctantcacta ggcattctta agagtnggtt 480
cccnttaata ctagncaacc nccactcca aaanancttc aagganaagc tntgntntnt 540
tanaaaatct ttctggnaca cantttnacn cttggcgenc angctggant gcaatggccg 600
tgatctctac tcacccgaan cctcngactg ctgagttcaa gtgattgtct gnccttanct 660
ctccgggacc angnttnggg attancaagc ctgcggggca annacaggtg nctaattgnt 720
tgcattngcn taaaatnagg acaccng 747

<210> 266
<211> 738
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(738)
<223> n = A,T,C or G

<400> 266
cgnnnntgaa ggntacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgcccag tgtgatggat atctgcagaa ttgcgccctt cgagcggccg cccgggcagg 120
tacagctgaa gtttgataac aaagaaatat atataagaca aaaatagaca agagttaaca 180
ataaaaacac aactatctgt tgacataaca tatggaaact tttgtcaga aagctacatc 240
ttcttaatct gattgtccaa atcattaaaa tatggatgat tcagtgccat tttgccagaa 300
attcgtttgg ctggatcata gattaacatt ttcgagagca aatccaagcc attttcatcc 360
aagtttttga catgggatgc taggcttctg gtttccattt gggaaaatgta ttcttatagt 420
cctgtaaaga ttccacttct ggccacactt cattattggg agtgcccaaa gctctgaaat 480
cctgaagagt tgatcaattc tgaatcccat ggaaaagtgg ttcttagtgc tagtcaacaa 540
atatnggngc ctatactcca aaggtcactt ggagttgagt natggagctg accccagcat 600
acttttggaa aactggacca agtggttgca ccaccnttaa aaaatttaaa accggngnga 660
ttttaaataa ggtggaagaa accttttctt tttttattta aggaattcac ttagcnctta 720
ctaaattcat ggtggggg 738

<210> 267
<211> 731
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(731)
<223> n = A,T,C or G

```

<400> 267
gngnntttgn aagggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttttcgag cggccgcccc ggcagggtaca gctgaagttt gataacaaag 120
aaatatatat aagacaaaaa tagacaagag ttaacaataa aaacacaact atctgttgac 180
ataacatatg gaaacttttt gtcagaaagc tacatcttct taatctgatt gtccaaatca 240
ttaaaatatg gatgattcag tgccattttg ccagaaattc gtttggtctg atcatagatt 300
aacattttcg agagcaaatc caagccattt tcattccaagt ttttgacatg ggatgctagg 360
cttcctgggt tccatttggg aaatgtattc ttatagtcct gtaaagattc cacttctggc 420
cacacttcat tattgggagt gcccaaagct ctgaaaatcc tgaagagttg atcaatttct 480
gaatccccat ggaaaagtgg tttcttagtt gctagttcag caaatatggt gcctatactc 540
caaatgtcaa ctggagttga gtaatgagct gaccccagca atacttctgg agatctgtca 600
agtggttgca acaccattaa aaaatataaa agcagtagtt atattaaaaa aatgttgaag 660
aaaacatatn cctatatatt tnaaggaatt tcactaagca ctactaaatt tcatgttggt 720
gggangngtt a 731

```

<210> 268

<211> 745

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(745)

<223> n = A,T,C or G

```

<400> 268
gnnnnnntaa agnanaentc actatanngc gaattggggc ctctagatgc atgctcgagc 60
ggccgcccagt gtgatggata tctgcagaat tcgccctttg agcggccgcc cgggcaggta 120
cttcccacac aggtttgttg taaaaattaa gtgagctaata gtgtataaaa tacttcagt 180
ctgaataaat gttggctttt attatatatt gttaaaaaac aacacaggct gggtatgata 240
gctcacgcct ataatcctag catttaggga ggccaaggca ggaggattgc ttgagtccag 300
gggttttgaga ccagcctggg caacatagtg agaccctatc tctacaaaat aaaataaatt 360
agttgggcat ggtggcacat gcctgtagtc ccagctactc agggaggctga ggtgggagga 420
ttgcttgagc ccaggaggta gaggttgagc tgagctgtga tcacaccact gcactccagc 480
gtcggtgacg gagtgagaa cttatctcaa caaacaacaa aaaaaaccca aaacaacaa 540
aaaaatccag taaagacaga gattcctaaa attctacaat tctaaaaacc agtagggctc 600
actgaatata agagaggcaa gcaaaaaatt actccaatat tttgagtttg ggtaacctgg 660
aatatgggtc atttattgag taaatagtta ctgagtccta actatgtgcc acacactggg 720
ttaacacttg gcactgtctc ttatg 745

```

<210> 269

<211> 730

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(730)

<223> n = A,T,C or G

```

<400> 269
gntnnnnntt tnaancecgt cctnntgcat gctcgagcgg cccgccagtg tgatggatat 60
ctgcagaatt cgccctttga ggcgcgccc gggcagggtac ttcccacaca gggttgtgt 120
aaaaattaag tgagctaata gtataaaaat acttcagtg cgaataaatg ttggctttta 180
ttatatattg ttaaaaaaca acacaggctg ggtatgatag ctcacgccta taatcctagc 240
atttagggag gccaaaggcag gaggattgct tgagtccagg ggtttgagac cagcctgggc 300
aacatagtgga gaccctatct ctacaaaata aaataaatta gttgggcatg gtggcacatg 360
cctgtagtcc cagctactca ggaggctgag gtggaggat tgcttgagcc caggaggtag 420
aggttgagc gagctgtgat cacaccactg cactccagcg tcggtgacgg agtgagaacc 480
tatctcaaac aaacaaacaa aaaaacccaa aacaaacaaa aaaatccagt aaagacagag 540
attcctaaaa ttctacaatt ctaaaaacca gtagggtctca ctgaatataa gagaggcaag 600

```

```

caaaaaatta ctccaatatt ttgagtttgg gtaacctgga atatgggtcat tattgagtna    660
atagttactg agtcctacta tgtgcccaca ctgggtnaac acttgactg tctcttatga    720
aatcttccan                                     730

```

```

<210> 270
<211> 713
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(713)
<223> n = A,T,C or G

```

```

<400> 270
aattgggccc tctagatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt    60
cgccctttcg agcggccgcc cgggcaggta caaaccaata gctcctattc tggaaagggtt    120
tctttttatt taaaaaaaaa tcaaacagg ttaaaagtca agcaagaagg gaagagagaa    180
actgggttct gagaaaaaaa tgtgccagta taaaataaac tcctaaatgc gtgcttgta    240
tcctctagtt ttttttttaa gttgaatttc ttttccactg taacttaaga tttgagattg    300
agggtttcgg tcagaacat accctcagca gatacagtga ctaactggaa agtgcagttg    360
ttcaaggctc gtcagtctca atcacctaaa gctataattt gnttgatata ttaagcatgt    420
agacctagtg cagcatggga gccactcagg aagtttatgc aattaataaa ctttcagcat    480
aatttactat gaagtatgca gaatttcacc ctcttctcca cacttaacat ttagttgtat    540
atgtgaactc tcctttctta attggggaat gtagcattat atagaatgtt gntaaaggta    600
attttaatcc tttttgacat taaccttttt tttttttggn aaaccaagtg atctgccttt    660
cagcaactgg cttattttgg gtctttgaaa ctgngatttt tatttcattn gnc          713

```

```

<210> 271
<211> 702
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(702)
<223> n = A,T,C or G

```

```

<400> 271
gnctcgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc    60
cgggcaggta caaaccaata gctcctattc tggaaagggtt tctttttatt taaaaaaaaa    120
tcaaacagg ttaaaagtca agcaagaagg gaagagagaa actgggttct gagaaaaaaa    180
tgtgccagta taaaataaac tcctaaatgc gtgcttgta tcctctagtt ttttttttaa    240
gttgaatttc ttttccactg taacttaaga tttgagattg aggtttgcgg tcagaacat    300
accctcagca gatacagtga ctaactggaa agtgcagttg ttcaaggctc gtcagtctca    360
atcacctaa agctataatt tgtttgatat attaagcatg tagacctagt gcagcatggg    420
agccactcag gaagtttatg caattaataa actttcagca taatttacta tgaagtatgc    480
agaatttcac cctcttctcc acacttaaca tttagttgta tatgtgaact ctcttttctt    540
aattggggaa tgnccattat atagaatgtt ggtaaaggta attttaatcc tttttgacat    600
taaccttttt ttttttttgg taaaccaagt gatctgnctt ttaacaactg gcttatttgg    660
gtcctttgna actgggaatt ttatttcatt tgnncctcgg cc                      702

```

```

<210> 272
<211> 736
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(736)
<223> n = A,T,C or G

```

<400> 272

| | | | | | | |
|-------------|------------|------------|-------------|------------|------------|-----|
| gnnnntttgan | nnnnnnnnnn | ntatagggcg | aattggggccc | tctagatgca | tgctcgagcg | 60 |
| gccgccagtg | tgatggatat | ctgcagaatt | cgccctttcg | agcggccgcc | cgggcaggta | 120 |
| ctttttttta | ttcctcagtt | aaaacatgcc | tggtattctt | tttgaatac | ttaagcaatt | 180 |
| ttattttaaa | gatatactac | ttagttcatc | cgtctccact | tgtttttttt | ttttggnant | 240 |
| anngggttg | ttccnttaan | nccacnggtt | ttaaancat | nntngtcnnn | ggnaaattan | 300 |
| nnttantnat | taaanntnnn | tnnctngca | aanntccagn | taaaatttta | gtgggggggg | 360 |
| ggggttantt | acnggnaann | aattaantnc | nggnaatan | tttaannntt | ggnaangnac | 420 |
| nntngnnnta | annattattt | nnttnanntt | tttaataann | annaatttta | nnttgnaacn | 480 |
| ntggntttta | ntaannggaa | annccaatta | attggttggt | tgnaattttc | ccagnaaccn | 540 |
| ntcentgggc | nggaacnnc | ntangggnaa | nttcnagnnn | ntngngggcn | gtncnnaggg | 600 |
| nnccaacnt | nggccannc | tgngggaann | nnnggcnnna | nnggttcccn | ggggnaaatg | 660 |
| gtattcngtt | cnaatccnnc | aantccaac | ccggagnctt | aangggtaan | nccngggggg | 720 |
| cntannagn | gcctaa | | | | | 736 |

<210> 273

<211> 715

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(715)

<223> n = A,T,C or G

<400> 273

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| gngntttnac | ganngnnnnn | nnnnnctgct | cgagcggccg | ccagtgtgat | ggatatctgc | 60 |
| agaattcgcc | ctttcgagcg | gccgccggg | caggtacttt | tttttattcc | tcagttaaaa | 120 |
| catgcctgtt | attctttttg | taatacttaa | gcaattttat | tttaaagata | tactacttag | 180 |
| ttcatccgtc | tccacttggt | tttttttttt | gnnantannng | ggttggttcc | nttaanncna | 240 |
| cnggtnttaa | anccannnnn | gtcnnnggna | aattannntt | antcnntaaa | nntnnnnnnc | 300 |
| ntggnaannn | tccagntaaa | atttnagtgg | gggggggggg | ttaattancg | gnaannantt | 360 |
| aantnccgga | naatanttta | annnttggn | angnacnttn | gnnttaagna | ttatttnntt | 420 |
| cannttttta | atnantanna | attttaattt | gnaancntgg | nntttannaa | nnggaaannc | 480 |
| caattaattg | gttggttgna | tttttcccag | naaccnnc | ntgggcngga | acancntaa | 540 |
| ggncaaatcn | accaantgnc | ggccgtacna | aggggatcca | acntnggcc | ancctggng | 600 |
| naataatggc | cnaantgggt | nccnggggna | aatggnattc | cgttcaaatt | ccnccanntc | 660 |
| cnaccggag | ccttaagnng | taaacctggg | ggcctaangg | ggggcctaac | tcaat | 715 |

<210> 274

<211> 746

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(746)

<223> n = A,T,C or G

<400> 274

| | | | | | | |
|------------|-------------|-------------|------------|------------|-------------|-----|
| gnnnntnnan | gnntacgact | cactataggg | cgaattgggc | cctctagatg | catgctcgag | 60 |
| cggccgccag | tgtgatggat | atctgcagaa | ttcgccctta | gcgtggtcgc | ggccgaggta | 120 |
| ccaggtgggc | tgacgcacat | cccctaaaca | ttctggatct | cttactcatc | gtgaaaggca | 180 |
| gacgctctaa | gtctaaagtc | tagggttagga | gtttccattc | tttgaaaaac | caaagatggg | 240 |
| tactcttctt | aatgaaactg | agaagaaggt | atctacagaa | aacactgaat | ttaaacaaat | 300 |
| tatgaccttg | tttggtgaag | ccatcaagga | cccaagatat | atcaaagaac | aacatctctg | 360 |
| tattggccta | cagggttcaga | gtgttttgag | gtctgtttta | gcactaatag | gatttttaggc | 420 |
| cagcatccag | tcagaagaga | tagttcacag | actcagagtt | ggaaacagat | taaaaaaaaa | 480 |
| aagatgtcaa | catagaaaat | gatgatagag | tttagttaaa | aaaattcaca | cataaaatta | 540 |
| cagttaaaaa | aattcacaca | taaaatagag | tgtttgcata | gcaagacatt | attgcccttc | 600 |
| agcctggcag | aaaaacataa | actcaggtgt | atattttata | ataaacattg | nattgaatgc | 660 |
| taagaatgat | acactggtga | acatctnctg | aatggttgcc | ttcttgtaaa | tcataccaat | 720 |

tggttagaca attgaaattn ccagct

746

<210> 275
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 275
gnnnttaann ccttcctnt anatgcatgc tgcagcgcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcgccg aggtaccagg tgggctgacg cacatcccct 120
aaacattctg gatctcttac tcacgtgaa aggcagacgc tctaagtcta aagtctaggg 180
taggagtttc cattctttgg aaaaccaaag atggttactc ttcttaatga aactgagaag 240
aaggatatct cagaaaacac tgaatttaaa caaattatga ccttgtttgt tgaagccatc 300
aaggacccea gatatatcaa agaacaacat ctctgtattg gcctacaggt tcagagtgtt 360
ttgaggtctg ttaagcact aataggattt taggccagca tccagtcaga agagatagtt 420
cacagactca gaggttgaaa cagattaaaa aaaaaagat gtcaacatag aaaaatgatga 480
tagagtttag ttaaaaaaat tcacacataa aattacagtt aaaaaaattc acacataaaa 540
tagagtgttt gcatagcaag acattattgc ccttcagcct ggcagaaaaa cataaactca 600
ggtgtatatt ttataataaa cattgnattg aatgctaaga atgatcactg ttgaacatct 660
cctgaatggt ttgccttctt gtaaatcata ccaatgggta gacaattgaa attccagctc 720
tttct 725

<210> 276
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 276
nnnnntgann gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggctgc ggccgaggta 120
cttctgctgt ggtaactcaa gtaaccctcc gtttaaacca ggacagacct atgctgacaa 180
ccatttttat cactcttagt ggtattttct ttctttgaac atgaatgcat atttctgctc 240
tttaatggcc ttggtattt aagattacat tcagctagtc tccttattgc atgttgtttt 300
attccagtcc caccagcact cagaacaaca gcaagtgtgt gtaacagcgg gcacaggcgc 360
tccagacgga aggacctcac tgacgcagtt agctcaggta gagcttattt ctgtgttcaa 420
ttttcttgtc atgagaagca gtgaccctta agaatttgta tccctttgtt cacttctttg 480
ttttaggaga gaaacttcta aagcattact ctaaaagggt atagagacag agacgggcca 540
ttttcatcta ccccttgacg agttaagttt tattacagta agttgtgagg tgagacatga 600
tggctgcagg cacatagtca agatctaccc ttctaaggaa ataaaacggg gaaaagtggg 660
tgaatgtcca atatagaaaa tttaatcacc actttcccaa aaaagaataa atggaggact 720
ncattggaat tatggaaatg aan 744

<210> 277
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 277
gnnnnntnncg antggggccct ctagatgcat gctcgagcgg ccgccagtgt gatggatatc 60
tgcagaattc gcccttagcg tggtcgcggc cgagggtactt ctgctgtggg aactcaagta 120
accctccgtt taaaccagga cagacctatg ctgacaacca tttttatcac tcttagtggt 180
attttctttc tttgaacatg aatgcatatt tctgctcttt aatggccttt ggtatttaag 240
attacattca gctagtctcc ttattgcatg ttgttttatt ccagtcccac cagcactcag 300
aacaacagca agtgtgtgta acagcgggca caggcgctcc agacggaagg acctcactga 360
cgcagtttagc tcaggttagag cttatttctg tgttcaattt tcttgtcatg agaagcagt 420
accctaaga atttgtatcc ctttgttcac ttctttgttt taggagagaa acttctaaag 480
cattactcta aaaggtgata gagacagaga cgggccattt tcactacccc cttgcagagt 540
taagttttat tacagtaagt tgtgaggtga gacatgatgg ctgcaggcac atagtcaaga 600
tctacccttc taaggaaata aaacggggaa aagtgggtga atgtccaata tagaaaattt 660
aatcaccact ttccaaaaaa gaataaatgg aggactncat tgtaattatg gaaatgaaat 720
ttgg 724

<210> 278

<211> 748

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(748)

<223> n = A,T,C or G

<400> 278
gnnnntgaaa gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cgcccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gtacagctgc ccaagggcgt tcgtaacggg aatgccgaag cgtgtgaaaa agggagcggg 180
ggcggaagac ggggatgagc tcaggacaga gccagaggcc aagaagagta agacggccgc 240
aaagaaaaat gacaaagagg cagcaggaga gggcccagcc ctgtatgagg acccccaga 300
tcagaaaacc tcaccagtg gcaaacctgc cacactcaag atctgctctt ggaatgtgga 360
tgggcttcga gcctggatta agaagaaagg attagattgg gtaaagggaag aagcccaga 420
tatactgtgc cttcaagaga ccaaattgtt agagaacaaa ctaccagctg aacttcagga 480
gctgcctgga ctctctcatc aatactggtc agctccttcg gacaagggaag ggtactagca 540
actaaccatg gttaaaagggt cttagtcaga attacaaaaa caaacattt agagtaatac 600
ttatgaatac aagcataatt ggttcctcgc cttctacaaa taaccatctt gaaaatgata 660
aaagcaggtt tcaactgtgg tcttctctca ttgagaagggt gcagatacac atgggtgatc 720
tactgattta ccttcttgaa agtncctcg 748

<210> 279

<211> 727

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(727)

<223> n = A,T,C or G

<400> 279
gnnnnntcga ntggggccctc tngngcatgc tcgagcggca cgccagtgtg atggatatct 60
gcagaattcg cccttttcgag cggccgcccc ggccaggtaca gctgcccagg ggcgttcgta 120
acgggaatgc cgaagcgtgt gaaaaagggg gcgggtggcg aagacgggga tgagctcagg 180
acagagccag aggccaaaga gagtaagacg gccgcaaaga aaaatgacaa agaggcagca 240
ggagagggcc cagccctgta tgaggacccc ccagatcaga aaacctcacc cagtggcaaa 300
cctgccacac tcaagatctg ctcttggaat gtggatgggc ttcgagcctg gattaagaag 360
aaaggattag attgggtaaa ggaagaagcc ccagatatat tgtgccttca agagacccaa 420
tggtcagaga acaaaactacc agctgaactc caggagctgc ctggactctc tcatcaatac 480
tggtcagctc cttcggacaa ggaagggtac tagcaactaa ccatgggttaa aaggtccttag 540
tcagaattac aaaaacaaaa catttagagt aatacttatg aatcaagcat aattgggtcc 600
tcgccttcta caaataccat ctttgaaaat gatnaaaagc aggtttcaac tgtgggttctt 660

ctctcanttg aaaaggtcag atcccatggg tgatctactg atttaccttc tgaaaagtac 720
ttggccg 727

<210> 280
<211> 751
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(751)
<223> n = A,T,C or G

<400> 280
gnnnttgann gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cgccgccag tgtgatgat atctgcagaa ttcgccctta gcgtggctgc ggccgaggta 120
ctcatgtatt tttttttttt tccagatctc ttccccaag ttgctattgt aagagtattc 180
tgctgcgtgt ggatgcagtt atacacatta aagcagatct ggagtctgaa gtagctataa 240
agcagctata aaacagaaat acatgcatag ctgcagaaac catgataggt agaggacttt 300
tcttttggtt ttgttttggt ttgttttggt ttgttttggt ttttacagag aagagatttt 360
tattacaaag aaaaaattc cagtgaattg tgcagaaatg ctggttttta caccatccta 420
aagaaaaact ttacaagggt gttttggagt agaaaaaagg ttataaagtt ggaatcttaa 480
attgtaaaaat taaccattga gtgtcaaagt tctaaaagca gaactcattt tgtgcaatga 540
acataaggaa agactactgn ataggttttt tttttctcct tttaaatgaa gaaaagcttt 600
gcttaagggt tgcatacttt tattggagta aatctgaatg atcctactcc tttggagtaa 660
aactagtgtc taccagtttc caattggatt taacttctgg ggtggaattt ggaaaaaaa 720
agaannnngg aaaaagaaaa cctaanttaa n 751

<210> 281
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G

<400> 281
gnnnttcgan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtactcat gtattttttt tttttccag 120
atctctttcc ccaagttgct attgtaagag tattctgctg cgtgtggatg cagttataca 180
cattaaagca gatctggagt ctgaagtagc tataaagcag ctataaaaca gaaatacatg 240
catagctgca gaaaccatga taggtagagg acttttcttt tggttttggt ttgttttggt 300
ttgttttggt tttggtttta cagagaagag atttttatta caaagaaaaa aattccagt 360
aattgtgcag aaatgctggt ttttacacca tctaaaagaa aaactttaca aggtgtgttt 420
ggagtagaaa aaagggtata aagttggaat cttaaattgt aaaattaacc attgagtgtc 480
aaagtcttaa aagcagaact cattttgctc aatgaacata aggaaagact actgnatagg 540
ttttttttt ctccttttaa atgaagaaaa gctttgctta agggttgcat acttttattg 600
gagtaaatct gaatgaccc actcctttgg agtaaaacta gngcttcag tttccaattg 660
gatttaactt ctggnctgga tttgnaaaaa aaagaanaaa aggaaaanga aaccctaant 720
naaatag 727

<210> 282
<211> 749
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(749)
<223> n = A,T,C or G

```

<400> 282
tnnaaagnaa gctctttact cactatnngg gcgaattggg ccctctagat gcatgctcga      60
gcggccgccg gtgtgatgga tatctgcaga attctncctt cgagcggccg cccgggcagg      120
tacttttttt tttttttttt tttttttttt ttttttnaac tactaggatt tactgtagga      180
taaaagctnt acatggccct gntacaaac tttctgcata cttctgcaaa tttttatgcn      240
ttactnaatc cattaataat caccttggaa naaactgcaa acncantana aactaaatga      300
natagtcaca gagaacanca aaaatagtaa ttnaagttcc catacaacat caagtgtgtn      360
cagtctatct tnggttcttc gggttctctt taaaattgaa ttgagtttgn atatgcatat      420
gtatgtagga gtggaggatg gaattaatta tcccaaacat cctacantca ctcctctaata      480
atttctttng ttaacatgca aatctgttct cttcattacg gngatactgc atttacatta      540
caacacantt agagatcatt aactttctcc tttataatca gccattttca caggcctttg      600
atatacaagc acctataata tattcttact catctcacac tttcatttac caaagtgtca      660
aaacaacatt tttacatcat tgatatttgg ttnantttct gcaanctggc tgttanaaaa      720
tgattacttc tnttaaatta ctttttanc                                     749

```

<210> 283

<211> 730

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(730)

<223> n = A,T,C or G

```

<400> 283
gtctntgaan cnggncctct ngatgcatgc tcgagcggcc gccagtggtga tggatatctg      60
cagaattcgc ccttcgagcg gccgcccggg caggtaacttt tttttttttt tttttttttt      120
tttttttttc aaactactag gatttactgt aggataaaaag ctntacatgg ccctgcatac      180
aaactttntg catacttntg caaattttta tgcattactc aatccattaa aaatcacctt      240
ggaanaaaact gcaaacncaa tagaaactaa atganatagt cacagagaac aacaaaaata      300
gtaattttaag ttcccataca acatcaagtg tgttcagttc atttttgggt cttcgggttc      360
tctttaaaat tgaattgagt ttgtatatgc atatgtatgt aggantggag gatggaatta      420
attatcccaa acatcctaca ctcactctc taatatttct tttgttaaca tgcaaatctg      480
ttctcttcac tacgngata ctgcatttac attacaacac aattagagat cattaacttt      540
ctcctttata atcagccatt ttcacaggcc tttgatatac aagcacctat aatataattct      600
tactcatctt acactttcat ttaccaaagt gtcaaaaaca acatttttac atcattggat      660
atttggttta gtttctgcaa nctggccttt anaaaaatga ttacttctct taaattacct      720
tttaccctca                                     730

```

<210> 284

<211> 739

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(739)

<223> n = A,T,C or G

```

<400> 284
gnnntnaaag tatacgactc actatagggc gaattggggc ctctagatgc atgctcgagc      60
ggccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac      120
aacataaagc aacagagagg tcttcatggt tgggaagtgg ctgggcagga tgccaaaccc      180
caaattgactt attgagcaat ttctaaacca aacagagagg taggaaaaga ggatgggggt      240
caggggtgga ggctgtggaa aggggagagc gagggctgaa gagaatggca gccatacagg      300
tgttttggtt ttatttccac atctgaggac tgagagtctg atttgctgcc tgtccatttc      360
cgccactcat tgactgtcca tagttcatca tgccattggc tccatagaag ttcattccag      420
ccatctgctg ggtcatctga gtaaggttcc attgcagctg ctgagctggc tggaccccat      480
acacagtctg gggcatagct gccatgcctg ccatgtagcc agcctgctgg gtgggtcatca      540
ttccattcgg cacacccatc attgatgcct gcatgccacc catatagcct gcaggcatgg      600

```

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ccatgggggc | aaccatccca | gaactnctgc | tgagcaacca | tgcctactgg | tggaagcatc | 660 |
| atgcttccca | ttatgctgtt | anganctgta | ccccngggaa | actggggtag | ctgtgggata | 720 |
| tccatctgan | ccggaccat | | | | | 739 |

<210> 285
 <211> 721
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(721)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|-------------|-------------|------------|------------|-----|
| <400> 285 | | | | | | |
| gnnnttcgan | tgggcccctct | ngatgcatgc | tcgagcggcc | gccagtgtga | tggatatctg | 60 |
| cagaattcgc | ccttagcgtg | gtcgcggcac | gaggtagaac | ataaagcaac | agagaggtct | 120 |
| tcatgttttg | gaagtggctg | ggcaggatgc | caaaccctaa | atgacttatt | gagcaatttc | 180 |
| taaaccaaac | agagaggtag | gaaaagagga | tgggggtcag | gggtggaggg | tgtggaaagg | 240 |
| ggagagcgag | ggctgaagag | aatggcagcc | atacaggtgt | tttggtttta | tttccacatc | 300 |
| tgaggactga | gagtctgatt | tgctgcctgt | ccatttccgc | cactcattga | ctgtccatag | 360 |
| ttcatcatgc | cattggctcc | atagaagtcc | atcccagcca | tctgctgggt | catctgagta | 420 |
| aggttccatt | gcagctgctg | agctggctgg | accccataca | cagtctgggg | catagctgcc | 480 |
| atgcctgcc | tgtagccagc | ctgctgggtg | gtcatcattc | cattcggcac | acccatcatt | 540 |
| gatgcctgca | tgccacccat | atagcctgca | ngcatggcca | tgggggcaac | catcccagaa | 600 |
| ctcctggctg | agcaaccatg | cctactgggtg | gangcatcat | gcttcccatt | atgctgttag | 660 |
| ganctgtacc | ccggggaanc | tggggtagct | gtgggatatac | catttaaccg | gagccatgaa | 720 |
| c | | | | | | 721 |

<210> 286
 <211> 757
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(757)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|-----|
| <400> 286 | | | | | | |
| gnnnnttaaa | gnntacgact | cactataggg | cgaattgggc | cctctagatg | catgctcgag | 60 |
| cggcccgcga | gtgtgatgga | tatctgcaga | attcgccctt | tcgagcggcc | gcccgggcag | 120 |
| gacgcggggg | ttgcaccatg | gcgtccatgg | ggaccctcgc | cttcgatgaa | tatgggagcc | 180 |
| ctttccctcat | catcaaggat | caggaccgca | agtcccgtct | tatgggactt | gaggccctca | 240 |
| agtctcatat | aatggcagca | aaggctgtag | caaatacaat | gagaacatca | cttggaccaa | 300 |
| atgggcttga | taagatgatg | gtggataagg | atggggatgt | gactgttaact | aatgatgggg | 360 |
| ccaccatctt | aagcatgatg | gatgttgatc | atcagattgc | caagctgatg | gtggaactgt | 420 |
| ccaagtctca | ggatgatgaa | attggagatg | gaaccacagg | agtggttgtc | ctggctgggtg | 480 |
| ccttggttaga | agaagcggag | caattgctag | accgaggcat | tcacccaatc | agaatagccc | 540 |
| gatggctatg | agcaggctgc | tcgcgttgct | attgaacacc | tggacaagat | cagcgatagc | 600 |
| gtccttggtg | acataaagga | caccgaaccc | ctgattcaga | cagcaaaaaa | ccacgctggg | 660 |
| cttncaaaag | tggtcaacag | ttgtcaccga | cagatggctt | gaaaattgct | gtgaaatgcc | 720 |
| cgtccttact | gtaaccagat | atngaaccgg | aaaagac | | | 757 |

<210> 287
 <211> 726
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(726)

<223> n = A,T,C or G

<400> 287

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|-----|
| gnnnnnactga | tttctggctc | gaagttgnat | ntgcggncgc | cagtgtgatg | gatatctgca | 60 |
| gaattcgccc | tttcgagcgg | ccgcccgggc | aggacgcggg | ggttgcacca | tggcgtccat | 120 |
| ggggaccctc | gccttcgatg | aatatgggcg | ccctttcctc | atcatcaagg | atcaggaccg | 180 |
| caagtcctcg | cttatgggac | ttgaggccct | caagtctcat | ataatggcag | caaaggctgt | 240 |
| agcaaataca | atgagaacat | cacttggacc | aaatgggctt | gataagatga | tgggtggataa | 300 |
| ggatggggat | gtgactgtaa | ctaagtatgg | ggccaccatc | ttaagcatga | tggatgttga | 360 |
| tcacagatt | gccaagctga | tggtggaact | gtccaagtct | caggatgatg | aaattggaga | 420 |
| tggaaccaca | ggagtgggtg | tcctggctgg | tgccttgta | gaagaagcgg | agcaattgct | 480 |
| agaccgaggc | attcacccaa | tcagaatagc | ccgatggcta | tgagcaggct | gctcgcgttg | 540 |
| ctattgaaca | cctggacaag | atcagcgata | gcgtccttgn | tgacataaag | gacaccgaac | 600 |
| ccctgattca | gacagcaaaa | accacgctgg | gctccaaaag | tggtcaacag | ttgtcaccga | 660 |
| cagatggctg | aaaatgctgt | gaatgccgtc | ctnctgtanc | agatatngaa | ccggaaaaga | 720 |
| ccttga | | | | | | 726 |

<210> 288

<211> 743

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(743)

<223> n = A,T,C or G

<400> 288

| | | | | | | |
|------------|-------------|-------------|-------------|------------|-------------|-----|
| gnnntganng | tatacgactc | actatagggc | gaattgggcc | ctctagatgc | atgctcgagc | 60 |
| ggccgccagt | gtgatggata | tctgcagaat | tcgcccctcg | gccgcccggg | cagggtacctt | 120 |
| ttacctaaaa | ttctagccac | tttaatttgg | agagtttcca | gagcaaaggg | cacagatccc | 180 |
| aggcataaca | acgctttgcg | tatacagcaa | ccaatatctt | gtcaacccaa | gaaagttcct | 240 |
| ccattgatac | ctagtagaaa | tagcccagtt | tttaaagtcc | tcaaaactgt | aacaaattac | 300 |
| ttgtttttaa | aattttaactt | aaattaatac | aatcagattt | ttgtgttatt | tgggtattag | 360 |
| agtatgttaa | agcacatata | tcccagagac | atagagtttc | cgtttcaaaa | agtcatgcat | 420 |
| tcattgtgtc | taatgacaat | cctatcctga | cccgcctatg | gacttgtatc | tctaaaccat | 480 |
| aggctttcct | gaattttatc | tgtaatttta | accctgattt | ctcagcagca | gcttctcttt | 540 |
| gtaaaatagc | ttgcctcttc | tgtgtctgac | ctctgctcct | cataatcaga | ttaactcaga | 600 |
| taaagctgct | tcaggggaaga | ggtcaaaaacc | ggttgccaaaa | atagtagttg | ccctacttca | 660 |
| gtctattttc | aacagagtag | cccaggagat | ctgtcacacc | aaagtccaat | cagccctact | 720 |
| ggtagcactc | tgntcacaag | ccn | | | | 743 |

<210> 289

<211> 726

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(726)

<223> n = A,T,C or G

<400> 289

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|-----|
| gnnnnnactc | gcagtcgctc | tagatgcatg | ctcgagcggc | cgccagtgtg | atggatatct | 60 |
| gcagaattcg | cccttcggcc | gcccgggcag | gtacctttta | cctaaaaattc | tagccacttt | 120 |
| aatttgaggga | gtttccagag | caaagggcac | agatcccagg | cataacaacg | ctttgcgtat | 180 |
| acagcaacca | atatcttgct | aaccgaagaa | agttcctcca | ttgataccta | gtagaaatag | 240 |
| cccagttttt | aaagtcctca | aaactgtaac | aaattacttg | tttttaaaat | ttaacttaaa | 300 |
| ttaatacaat | cagatttttg | tgttatttgg | gtatttagagt | atgttaaagc | acatatatcc | 360 |
| cagagacata | gagtttccgt | ttcaaaaagt | catgcattca | tgtgtgctaa | tgacaatcct | 420 |
| atcctgaccc | gcttatgtgac | ttgtatctct | aaaccatagg | ctttcctgaa | ttttatctgt | 480 |
| taatttaacc | ctgatttctc | agcagcagct | tctctttgta | aatagacttg | cctcttctgt | 540 |

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gtctgacctc tgctcctcat aatcagatta actcagataa agctgcttca gggaaagagg 600
caaaaccgtt gccaaaaata gtagttgccc tacttcagtc tattttcaac agagtagcca 660
ggagatctgt tcacacaaa gtccaatcag ccctactggt agcactctgc tcacaagcct 720
ncagtg 726

```

```

<210> 290
<211> 740
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(740)
<223> n = A,T,C or G

```

```

<400> 290
gnnnnngaag tatacgactc actatagggc gaattggggc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgcccttag cgtggctcgc gccgaggtag 120
ccagatgtct ttctcgtca ccttcccag accatttaag acctccctag ctgctcgctc 180
tccagcctca actgcccctt ccatgtagcc gctccacttt gtggcagtct ctgtgccgc 240
aaagaaaatc ctgcccacgg gttgacgaat cacccttcca tattgagtca tgatcccagg 300
agggaaagtag gccgtgtagc agccccaga gtacctgccc gggcgccgc tcgaaagggc 360
gaattccagc aactggcgcc cgttacttag tggatccgag ctccgtacca agcttggcgt 420
aatcatgggc atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca 480
tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgcgc taactcacat 540
taattgcgtt gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt 600
aatgaatcgg ccaacgcgcc ggggagaggg ggnttgcgta ttgggcgctc ttncgctttc 660
tngtcactg actcgtcgcg ctccgtcgtt cggctgcggc naggcgtatc agctcattaa 720
angcggaat acggtatccn 740

```

```

<210> 291
<211> 724
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

```

```

<400> 291
gnnnnnncna ntgggcccctc tngngcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtacccag atgtctttct cggtcacctt 120
cccagagacca tttaagacct ccctagctgc tcgttctcca gcctcaactg ccccttccat 180
gtagccgctc cactttgtgg cagtctctgt gcccgcaaag aaaatcctgc ccacgggttg 240
acgaatcacc cttccatatt gagtcatgat cccaggaggg aagtaggcgc tgtagcagcc 300
cccagagtac ctgcccgggc ggcgctcga aagggcgaat tccagcacac tggcgccgt 360
tactagtga tccgagctcg gtaccaagct tggcgtaatc atggcatag ctgtttcctg 420
tgtgaaattg ttatccgctc acaattccac acaacatacg agccggaagc ataaagtgt 480
aagcctgggg tgcctaata gtagctaac tcacattaat tgcgttgcgc tcaactgccc 540
ctttccagtc gggaaacctg tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga 600
gaggcggttt gcgtattggg cgctcttccg ctccctcgtc cactgactcg ctgcgcttng 660
nccgtccggg tgcggcagcg gtataactna ctcaaaggcg gtaataccgg tatncacaga 720
atca 724

```

```

<210> 292
<211> 740
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature

```

<222> (1)... (740)

<223> n = A,T,C or G

<400> 292

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| gnnnnngnang | tatacgactc | actatagggc | gaattggggc | ctctagatgc | atgctcgagc | 60 |
| ggcccgccag | tgtgatggat | atctgcagaa | ttcgccctta | gcgtgggtcg | ggccgaggta | 120 |
| cagaaagaat | caaagaacat | atatatatat | taagtttcat | tccaacctac | aaagagcctg | 180 |
| cacttaaaag | tcttaaaggt | ttcctgaatc | atggaatctc | aacttacctg | ccaattaatc | 240 |
| cagttctctc | tttttaaag | cagactccaa | ccttaaacag | aaggcatatt | ctagctgact | 300 |
| tctaagtggtg | tccaaagcat | acctcagaga | gccaaagtgt | ctgtgttcaa | tacctattct | 360 |
| ttctatagaa | tctcaaaagt | ggcagtatga | tgaaaagaaa | agctactttt | tctcctaaaa | 420 |
| atacccccct | tcacatcag | tgtgttgatc | tttttgatc | acaaagaata | gacattctaa | 480 |
| atgttccctt | ccacacagaa | agacataaga | gagaatgtga | gtatgagtga | gagtgtgtag | 540 |
| gtaagttgag | ggatagtttg | ctatccaaaa | tgaatcattt | tgaagatgac | tttgtaaaga | 600 |
| agtaatatag | ttaaaaatct | caagacatga | gattgangan | ggcagggaaa | taaaggacct | 660 |
| angaatggaa | aagagttaca | gcccattgtga | atacatcac | aaacctacca | ggttatttct | 720 |
| gngaattctc | acacaggttg | | | | | 740 |

<210> 293

<211> 723

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)... (723)

<223> n = A,T,C or G

<400> 293

| | | | | | | |
|------------|-------------|-------------|------------|------------|-------------|-----|
| gnnnnnnnn | annggcctc | tagatgcattg | ctcgagcggc | cgccagtgtg | atggatatct | 60 |
| gcagaattcg | cccttagcgt | ggtcgcgggc | gaggtacaga | aagaatcaaa | gaacatatat | 120 |
| atatattaag | tttcattcca | acctacaaag | agcctgcact | taaaagtctt | aaagggtttcc | 180 |
| tgaatcatgg | aatctcaact | tacctgccaa | ttaatccagt | tctctctttt | taaatgcaga | 240 |
| ctccaacctt | aaacagaagg | catattctag | ctgacttcta | agtgtgtcca | aagcatacct | 300 |
| cagagagcca | agtgggtctgt | gttcaatacc | tattctttct | atagaatctc | aaaagtggca | 360 |
| gtatgatgaa | aagaaaagct | actttttctc | ctaaaaatac | cccccttcat | catcagtgtg | 420 |
| ttgtcatatt | tgcacacaaa | agaatagaca | ttctaaatgt | tcccttccac | acagaaagac | 480 |
| ataagagaga | atgtgagtat | gagtggaggt | gtgtaggtaa | gttgagggat | agtttgctat | 540 |
| ccaaaatgaa | tcattttgaa | gatgactttg | taaagaagta | atatagttaa | aaatctcaag | 600 |
| agcatgagat | tganganggc | agggaaataa | angcctagga | atggaaaaga | gttaacagcc | 660 |
| catgtgaata | catagcacaa | acctaccagg | ttatttcttg | gaatctnacc | agtttgctgg | 720 |
| aaa | | | | | | 723 |

<210> 294

<211> 736

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)... (736)

<223> n = A,T,C or G

<400> 294

| | | | | | | |
|------------|------------|------------|-------------|-------------|-------------|-----|
| gnnnnnnnna | gaccgactca | ctatagggcg | aattggggccc | tctagatgca | tgctcgagcg | 60 |
| gccgccagtg | tgatggatat | ctgcagaatt | cgccctttcg | agcgggccgc | cgggcaggta | 120 |
| cctgggatta | caggcaccca | ccaccacgcc | tggtcaattt | ttttttgtat | cttttagtagg | 180 |
| gttttgccat | gttggccagg | ctggtcttta | actcctacct | cgtgatccac | ccgcctcggc | 240 |
| cccccaaagt | gctaggacca | caggcgtgag | ccaccacgcc | cagccccctg | tctctttttt | 300 |
| taaaaacaaa | tttaaaagca | gaaagaaaaa | atctgtgctg | tttagactca | gattcttaaat | 360 |
| tagctagtat | ttcttaattc | aatcaataaa | ttattaagac | cttttctactg | ctcccttttt | 420 |
| aaagtcttct | ttggagtgat | ttaagtgtct | cttattacca | agctctcaaa | gagaagataa | 480 |


```

aattaaaaatc tgatgggtaa ccattttaat aagacaactg gggtaaccca tttctccagg 540
accctctctt gcaacagaga gctattctct ttctttggcc tagtaaacct ctgctcttaa 600
ccttttaaaaa aaaaaaaaaa gtacctcgcc cgcgaccacg ctaanggcga attccagcac 660
actggcgccc gttactagtg gatccgaact cggccaact tggcgtaatc atggcatagt 720
ggttcctgng tgaaan 736

```

```

<210> 295
<211> 725
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

```

```

<400> 295
gnnnnnnnnn annngncct ctagatgcat gctcgagcgg ccgccagtgt gatggatatc 60
tgcagaattc gccctttcga gcggccgccc gggcaggtag ctgggattac aggcacccac 120
caccacgcct ggctaatttt tttttgtatc ttttagtagg ttttgccatg ttggccaggc 180
tggtctttaa ctctacctc gtgatccacc cgcctcggcc ccccaaagtg ctaggaccac 240
aggcgtgagc caccacgccc agccccctgt ctcttttttt aaacacacaat ttaaaagcag 300
aaagaaaaaa tctgtgctgt ttagactcag attcttaatt agctagtatt tcttaattca 360
atcaataaat tattaagacc ttttctactgc tcccttttta aagtcttctt tggagtgtatt 420
taagtgtctt ttattaccaa gctctcaaag agaagataaa attaaatct gatgggtaac 480
catttaataa agacaactgg ggtaacccat ttctccagga cccctctctg caacagagag 540
ctattctctt tctttggcct agtaaacctc tgctcttaac ctttaaaaaa aaaaaaaaaa 600
tacctcggcc gcgaccacgc taaggcgcaa ttccagcaca ctggcgcccg ttactagtgg 660
atccgaactc ggtaccaagc ttgcgtaatc atggcatagc tggttcctgt gtgaaatggt 720
atccg 725

```

```

<210> 296
<211> 742
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(742)
<223> n = A,T,C or G

```

```

<400> 296
gnnnnnnnnn nnacaaanct gggtaggggc aattgggccc tctagatgca tgctcgagcg 60
gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcgcccgcc cgggcaggta 120
ccatgctgac ttcttggtat cttttaaggc ctaattttcc cttccttgag attactgtag 180
tgtgttcag ctaatttcta tttggaaacg agttggaaca gctgaaaact aggtattatt 240
gaaggcaaag cagcctcacg tcagtttttt atcagctcat ttgggaagtt tttttttttt 300
ttttttttta attaattaga aagtaggctg ggcacggtgg ctcatgccta taatcccagc 360
acttggggag gccgaggatc tcctctctgg tggatcactt gagggcagga gttaagagac 420
catcctggcc aacatgatga aacctgtct ctactaaaaa tacaaaaagt agctgggcgt 480
ggtggcatat tcttacaatc ccagctactt gggaggctga ggcaggagaa tcacttgaac 540
ctaggaagca gaggttgtag tggccaaga tcacaccact atactctagc ctgggcgaca 600
gaagtgggga aaaaagtagg acccctgtcc tatattcang gttttctcac atatatgaac 660
ccatctaaat tctacgttgg taaaaggaac ctaagggttaa ttagnctata cttatttaag 720
aaccattntg gggnggagat gg 742

```

```

<210> 297
<211> 728
<212> DNA
<213> Homo Sapien

```

```

<220>

```

<221> misc_feature
 <222> (1)...(728)
 <223> n = A,T,C or G

<400> 297
 tnnnnntttga annncnacnct ctagngcatg ctcgagcggc cgccagtgtg atggatatct 60
 gcagaattcg cccttttcgag cggccgcccg ggcaggtacc atgctgactt cttgggtatct 120
 ttttaaggcct aattttccct tccttgagat tactgtagtg tgttccagct aattttctatt 180
 tggaaacgag ttggaacagc tgaaaactag gtattattga aggcaaagca gcctcacgtc 240
 agttttttat cagctcattt gggaaagttt tttttttttt tttttttaat taattagaaa 300
 gtaggctggg cacggtggct catgcctata atcccagcac ttggggaggc cgaggatctc 360
 ctctctgggt gatcacttga gggcaggagt taagagacca tctgggcaa catgatgaaa 420
 ccctgtctct actaaaaata caaaaagtag ctgggcgtgg tggcatactc ttacaatccc 480
 agctacttgg gaggtgagg caggagaatc acttgaacct aggaagcaga ggttgcagtg 540
 ggccaagatc acaccactat actctagcct gggcgacaga agtggggaaa aaagttaggac 600
 ccctgtccta tattcangtt tttctcacat atatgaacct atctaaattc tacgttggtg 660
 aaggtanctt aagttaatta gnctatactt atttaaganc aatatggggt gaaaatggat 720
 tttttttt 728

<210> 298
 <211> 745
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(745)
 <223> n = A,T,C or G

<400> 298
 gnnnnnttna nnnnatacga ctactatat agggcgaatt gggccctcta gatgcatgct 60
 cgagcggccg ccagtgtgat ggatatctgc agaattcgcc cttagcgtgg tcgcgccga 120
 ggtacccacg ttttgctcca cactccttga ccgcaggggc tcggacacaa acccctgtca 180
 ccaggagagt cagtcagcac tacttgggag ggctaaagg aaatttggaa ataaaattcc 240
 aaagtttgga gtataaaaaat tcaagtgttg attttatatt ctttcccttt ctgacacagc 300
 ctaaaagcga gggggaacat gtgtttatct gtgggagata aacaagatgg agtcccaaag 360
 actttaacaa aatatttttt taaaaatcca ctagaataga aaatacatta tttagatata 420
 ctttatgctg agagttagta tatatgcttg tcctatttaa acttgtgaga aaaagtggta 480
 tcccttgata catttagaaa tatgggggct atcttgtttc attgtggggg tggggcagaa 540
 ggagaataaa tgcaggatga ccctgttgaa ggaatcctag catggccaac aggggacggt 600
 tccagtcgat taccaggaaa tgcaagcctt ggggtttcta ctggtggtgg ggctgtcatg 660
 aactttaaaa tccaaagcct agacaaggaa aagtgttaga ccaattgaaa agcaatccac 720
 cctttttttt tttttttttt ggctt 745

<210> 299
 <211> 733
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(733)
 <223> n = A,T,C or G

<400> 299
 gnnnnnnnnn nnnnnnnnct ctagatgctg ctcgaacggc cgccagtgtg atggatatct 60
 gcagaattcg cccttagcgt ggtcgcggcc gaggtacca cgttttgctc cacactcctt 120
 gaccgcaggg gctcggacac aaaccctgt caccaggaga gtcagtcagc actacttggg 180
 agggctaaag ggaattttgg aaataaaaatt ccaaagtgtg gagtaaaaaa attcaagtgt 240
 tgattttata ttctttccct ttctgacaca gcctaaagcg tagggggaac atgtgtttat 300
 ctgtggggaga taaacaagat ggagtcccaa agactttaac aaaatatttt tttaaaaatc 360
 cactagaata gaaaatacat tatttagata tactttatgc tgagagttag tataatgctt 420

```

tgtcctatatt aaacttgtga gaaaaagtgg tatcccttga tacatttaga aatatggggg 480
ctatcttggtt tcattgtggg ggtggggcag aaggagaata aatgccagga tgaccctgtt 540
gaaggaatctt tancatggcc aacaggggac gtttccagtc gattaccagg aaatgcaagc 600
cttgggggttt ctactgggtg tggggctgtc atgaacnttt aaaatccaaa gcctagacca 660
aggaaaagtg ttaganccan tggaaaagcc attccagccc tttttttttn nnnntttttg 720
gcttttcacc aca 733

```

```

<210> 300
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

```

```

<400> 300
gnnnntgann gtatacgaac tcactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggcccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gtacgtagtc taggcatat gtgttgaga ttgagactag tagggctagg ccaccgctg 180
cttcgcaggc ggcaaagact agtatggcaa taggcacaat attggctaag agggagtggg 240
tgttgagggt tatgagagta gctataatga acagcgatag tattattcct tctaggcaca 300
gtagggagga tatgaggtgt gagcgatata ctagtattcc tagaagttag atggtaaatg 360
ctagtataat atttatgtaa atgaggggccc ccgcgtactc aagtgggtct ctgcctctca 420
gtggtggcct tggctctcaa gtttcagcaa ttctgggaag ccaaggacac ctccatctcc 480
tcctccctga tctgcaactc atctaagagc agctttctca ctggaatgtc ttgtgtttaa 540
ggaacaagaa tccctgtttc cggtttggtt gcccaagtgc acctactgga tccaaccag 600
gattggagat actttgcaga acacaacatc atctggcaca tgaccagcca tgggtgtttca 660
cttcacaaat ttcagcttnc ttcactgatt gcagcataat cgnggtcaac accttcaaga 720
ccaaggctga tgtgggccgc t 741

```

```

<210> 301
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

```

```

<400> 301
gnnnnntnch antgggccct ctngngcatn gctcgagcgg cagccagtg tgatggatat 60
ctgcagaatt cggcctttcg agcggccgcc cgggcaggta cgtagtctag gccatatgtg 120
ttggagattg agactagtag ggctaggccc accgctgctt cgcaggcggc aaagactagt 180
atggcaatag gcacaatatt ggctaagagg gagtgggtgt tgagggttat gagagttagt 240
ataatgaaca gcgatagtat tattccttct aggcacagta gggaggatat gaggtgtgag 300
cgatatacta gtattcctag aagtgagatg gtaaatgcta gtataatatt tatgtaaatg 360
agggggcccg cgtactcaag tgggtctctg cctctcagtg gtggccttgg tcttcaagtt 420
tcagcaattc tgggaagcca aggacacctc catctcctcc tccctgatct gcaactcatc 480
taagagcagc tttctcactg gaatgtcttg tgtttaagga acaagaatcc ctgtttccgg 540
tttgggtgcc caagtgcacc tactggatcc aaccaggat tggagatact ttgcagaaca 600
caacatcatc tggcacatga ccagccatgg tgtttcactt tcacaatttc agcttncttc 660
actgattgca cataatcgtg gtcaaacacct tcaagaccan ggctgatgtg ggccgntaca 720
ngga 724

```

```

<210> 302
<211> 745
<212> DNA
<213> Homo Sapien

```

<220>
<221> misc_feature
<222> (1)...(745)
<223> n = A,T,C or G

<400> 302
gnnnntgaaa gtntanacga ctactatag ggcgaattgg gccctctaga tgcattgctcg 60
agcggccgcc agtgtgatgg atatctgcag aattcgccct ttcgagcggc cgcccgggca 120
ggtactattc cggatataca agatcactgg gagatgttga tgatggagac acagtgcag 180
atttcatggc ccaagagcga gaaagaggca ttactattca atcagctgct gttacatttg 240
attggaagg ttatagagtc aatctaattg atacaccagg tcatgtggac tttaccttg 300
aggttgagcg gtgcctaaga gtgttgatg gtgcagtggc tgtatttgat gcctctgctg 360
gtgtagaggc ccagactctc acagtatgga ggcaagctga taaacacaat atacctcgaa 420
tctgtttttt aaacaagatg gacaaaactg gagcaagctt taagtatgca gttgaaagca 480
tcagagagaa gttaaaaggca aagcctttgc ttttacagtt accaattggg gaagccaaaa 540
ctttcaaagg agtgggtgat gtagtaatga aagaaaaact tctttggaat tgcaattcaa 600
atgatgaaa agactttgag agaaagcccc tcttggaat gaatgatcct gaattgctga 660
aggaaacaac tgaagcaagg aatgccttaa ttgaacaagt tgcagaattt ggatgatgaa 720
ttgctgactt gggtttanaa naaat 745

<210> 303
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 303
gnnnntcgan tgggcccttc tagatgcatg ctgcagcggc cgccagtgtg atggatatct 60
gcagaattcg ccttttcgag cggccgccc ggcagggtact attccggata tacaagatca 120
ctgggagatg ttgatgatgg agacacagt acagatttca tggccaaga gcgagaaaga 180
ggcattacta ttcaatcagc tgctgttaca tttgattgga aaggttatag agtcaatcta 240
attgatacac caggtcatgt ggactttacc ttggagggtg agcgggtgct aagagtgttg 300
gatgggtgac tggctgtatt tgatgcctct gctgggtgtag aggccagac tctcacagta 360
tggaggcaag ctgataaaca caatatacct cgaatctgtt ttttaaaaa gatggacaaa 420
actggagcaa gctttaagta tgcagttaa agcatcagag agaagttaa ggcaaagcct 480
ttgcttttac agttaccaat tgggtaagcc aaaactttca aaggagtggg ggatgtagta 540
atgaaagaaa aacttctttg gaattgcaat tcaaatgatg gaaaagactt tgagagaaa 600
cccctcttgg aaatgaatga tcctgaattg ctgaaggaaa caactgaagc aaggaatgcc 660
ttaattgaca agttgcagat ttggatgatg aatttgctga cttggtttta gaagaattan 720
tgag 724

<210> 304
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

<400> 304
gnnnnnngaa agtntacgac tcaactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggccgccca gtgtgatgga tatctgcaga attcgccctt agcgtggtcg cggccgagg 120
actttataaa tggaaatttc ttctacttgt atccatttcc cggggcttat ggaccattc 180
atactctcca tatttagaat caaagggttc tttctgaaga gaccttaatt ttaaggtaaa 240
acgtggtcca agttcctgaa ttcccacttt cttttcactc ctgaatatgt atctgtgaaa 300
tctgaagaat atgtaatccc gttgattgtg gaatgtggca acctgccttc cgataaattg 360

```

aggattatga ggaaagagag atgcaaacat acgtccaatt gaatgaccca gccgtgttgt 420
aaaattattc agaattattt cagggtatgtg ttctgtgggg tccttgccctc ttctcttaat 480
ttctttacga agacgaacac tgctcathtt aaaatgagca gttgggcat ttggcaagt 540
actcaaaata agtccatttg gggttttacg atcttcatta ataacaatca ggtctgtgaa 600
atctcttgcg atgcactgtg gaataatttt ttccagaacc agcctcttct gtaataaaca 660
tgtgagtttg gtataactgt gganagctgt cacagagtcg taccagtata ccaaccatac 720
caactntgtt gtagagcaaa a 741

```

<210> 305

<211> 719

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(719)

<223> n = A,T,C or G

<400> 305

```

gnnnttncaa ntgggcctc tngatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttagcgt ggtcgcggcc gaggtacttt ataaatggaa ttttcttcta 120
cttgatatcca ttccccggg cttatggacc cattcatact ctccatattt agaatcaaag 180
gttcctttct gaagagacct taattttaag gtaaaacgtg gtccaagtcc ctgaattccc 240
actttctttt cactcctgaa tatgtatctg tgaaatctga agaatatgta atcccgttga 300
ttgtggaatg tggcaacctg ccttccgata aattgaggat tatgaggaaa gagagatgca 360
aacatacgtc caattgaatg acccagccgt gttgtaaaat tattcagaat tatttcagggt 420
atgtgttctg tggggtcctt gcctcttctc ttaatttctt tacgaagacg aacactgctc 480
attttaaaaa gagcagttgg gccatttggc aagtgactca aaataagtcc atttggggtt 540
ttacgatctt cattaataac aatcaggtct gtgaaatctc ttgcgatgca ctgtggaata 600
attttttcag agccagtcct cttctgtaat aaacatgtga agtttggtat actgtggana 660
gctgtcacag agtcgacagt ataccaacca taccaactct gttgnagaac anaacccat 719

```

<210> 306

<211> 746

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(746)

<223> n = A,T,C or G

<400> 306

```

gnnnnntgaa agtatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggcccgcca gtgtgatgga tatctgcaga attcgcctt tcgagcggcc gcccgggcag 120
gtactccagc ccaggcgaca gagtgagact cagtctcaaa aaaaaaaaaa atttgggcaa 180
gttatagtc atctcatagt gttgttagga ctaatttctt catgtgctta gaaaaatgcc 240
tggcagatag gaaatggtca atattattat tattgataag atgaccattt tggagttag 300
aaaaccattt tcaatgccta tgaaataaca actccataag ccattccctt aaatccagta 360
gactgaattc tcacaagtcc tcactactca tcatttctac atcctgctga tttacaaata 420
cttcttcata ccatggttta tgtctttgct taatatcaag gaggatggat tccatggtag 480
agccaaactc aatgatacta cgagtctcat tttggtaagt ataagcaaag ccagcagcat 540
gcatggccac caatgaacct tttgaatcaa acacagggga gcccggaagc cccaaagaaa 600
aattcagtg cataggtaat cacatcangg ttgtgaacta ttttctggaa acttctttga 660
gtatacatat ggacatactc tggactttct gcttttttag actgaacacg ttcttgacat 720
ttctttgctc gctgacctg anggat 746

```

<210> 307

<211> 725

<212> DNA

<213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(725)
 <223> n = A,T,C or G

<400> 307
 gnnnnntncn antggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
 gcagaattcg ccctttcgag cggccgcccg ggcaggtact ccagcccagg cgacagagtg 120
 agactcagtc tcaaaaaaaa aaaaaatttg ggcaagttat agtccatctc atagtgttgt 180
 taggactaat ttcttcatgt gcttagaaaa atgcctggca gataggaaat ggtcaatatt 240
 attattattg ataagatgac ctttttgag tttagaaaac ctttttcaat gcctatgaaa 300
 taacaactcc ataagccatt cccttaaadc cagtagactg aattctcaca agtcctcatc 360
 actcatcatt tctacatcct gctgatttac aaatacttct tcataccatg gtttatgtct 420
 ttgcttaata tcaaggagga tggattccat ggtagagcca aactcaatga tactacgagt 480
 ctcattttgg taagtataag caaagccagc agcatgcatg gccaccaatg aaccttttga 540
 atcaaacaca ggggagccgg aagcccaaaa gaaaaattca gtgtcatagg taatcacatc 600
 anggttgtga actattttct ggaaacttct ttgagtatac atatggacat actctggact 660
 ttctgctttt ttagactgac acgttcctga ctttctttg ctcgctgacc ctgagggatc 720
 acang 725

<210> 308
 <211> 744
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(744)
 <223> n = A,T,C or G

<400> 308
 gnnnntgaaa gtaatacgac tcaatatagg gcgaattggg ccctctagat gcatgctcga 60
 gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
 gtacgcgggg tgacaagtag caacatggct tgggtcccct gtgcagcatc agcttatgct 180
 gccacaagtc agtttgcacc ctaggtaccg aggagctagt atccttagat ctttctatcg 240
 ctaacttaat tctcttcggt atttatctga ccctctaact ccatgtctaa cttgcattaa 300
 aaaaaaaaaa attctttaca gtcaacccaa gcttaacatg gactcagggt cccagcagc 360
 cttaatttgt tttgttaaca tctgttcctt ctttttcagc tctcctagag tatttctgag 420
 tgttgtgttc atctaactct agtattcttt taattacaaa ttgacctcac agcttgagggt 480
 ttctgtgtgc ttattctgtg gactacctgt gctcctttgc ttcccctccc ctcgcataat 540
 aactatatta agaaattttt tttggccttg agttggcttg aaaaaaata taaaatttaa 600
 aaaaaaaaaa nnnnnnnnaa aaaaaaaaaa tacctnggac gggaccacgc taanggcgaa 660
 ttccagcaca ctggcgccg ttactaagtg gatccgaact cggtaaccaac ttggcgtaat 720
 catggcatag ctggttcctg ngga 744

<210> 309
 <211> 746
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(746)
 <223> n = A,T,C or G

<400> 309
 gnnnntncga ntgggcccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
 gcagaattcg ccctttcgag cggccgcccg ggcaggtacg cggggtgaca agtagcaaca 120
 tggcttgggt ccctgtgca gcatcagctt atgctgccac aagtcagttt gcaccctagg 180
 taccaggag ctagtacct tagatctttc tatcgctaac ttaattctct tcgttattta 240
 tctgacctc taactccatg tctaacttgc attaaaaaaa aaaaaattct ttacagtcaa 300
 cccaagctta acatggactc aggttcccca gcagccttaa tttgttttgt taacatctgt 360

```

tccttctttt tcagctctcc tagagtattt ctgagtgttg tgttcattcta atcttagtat 420
tcttttaatt acaaattgac ctcacagctt gaggtttcct gtgtcttatt ctgtggacta 480
cctgtgctcc tttgtctccc ctcctcctgc ataataacta tattaagaaa ttttttttgg 540
ccttgagttg gctggaaaaa aaatataaaa tttaaaaaaa aaannnnnnn nnnnaaaaaa 600
aaaagtcctt ggccgggacc acnctaangg cgaaattcca gcacaactgg gcggnccggt 660
actaagggga atccnaact tnggnaccn aaacttgggc gtaaaacaat ggncaataa 720
gctggnnncc ctgnggtga aaaatt 746

```

```

<210> 310
<211> 751
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(751)
<223> n = A,T,C or G

```

```

<400> 310
gnnnntgana gtaatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gtacttaatg cctttctcct cctggacatc agagagaaca cctgggtatt ctggcagaag 180
tttatatttc tccaaatcaa tttctggaaa aaacgtgtca ctttcaaagt cttgcatgat 240
ccttgcacaa aatagttaa gatggcctgg gtgattcatg gcttccttat aaacagaact 300
gccaccaact atccagacca tgtctacttt atttgtaat tctggttgtt cagtaagttt 360
taaggcatca tctagacttc tggaaagaaa atgagctcct tgtggagggt ccttgagttc 420
tctgctgaga actaaattaa ttctaccctt taaaggctga ttcttctcag gaatggagaa 480
ccaggctctt ttaccataa tcaccagatt ctgnttacct tctactgaag aagtgtgtgt 540
cattctctgg aaatatctga attcattcct gagcgggtgg caaggcangt ncccgttctt 600
gccgatgccc atgttctggg acacagcgac gatgcagttt agcgaaccaa ccatgacagc 660
aaccggggang accttcgagc ccggttcgnt acaagccccc gcgtacctn gggccgngaa 720
cacgcttaag ggcgaattnc aacacactgg c 751

```

```

<210> 311
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

```

```

<400> 311
gnnttncnan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ctttctgagc ggccgcccgg gcaggactt aatgccttc tctcctgga 120
catcagagag aacacctggg tattctggca gaagtattata tttctccaaa tcaatttctg 180
gaaaaaacgt gtcactttca agtcttgca tgatccttgt cacaataagt ttaagatggc 240
ctgggtgatt catggcttcc ttataaacag aactgccacc aactatccag accatgtcta 300
ctttatttgc taattctggt tgttcagtaa gttttaaggc atcatctaga cttctggaaa 360
gaaaatgagc tccttggtga ggttccttga gttctctgct gagaactaaa ttaattctac 420
cctttaaagg tcgattcttc tcaggaatgg agaaccaggt cttcttacc ataataacca 480
gattctgttt acctctact gaagaggttg tggtcattct ctggaaatat ctgaattcat 540
tcctgagcgg tggccaaggc angtecccg tcttgccgat gcccatgttc tgggacacag 600
cgacgatgca gtttancgaa ccacccatga cagcagcggg aggaccttcg agcccgctcg 660
ttacaagccc ccgctacct tnggcccgca acaccttang gcgaaattca acacactggc 720
ggcc 746

```

```

<210> 312
<211> 738
<212> DNA
<213> Homo Sapien

```

<220>
 <221> misc_feature
 <222> (1)...(738)
 <223> n = A,T,C or G

<400> 312
 nnnntttgaa gnctacnact cactataggg cgaattgggc cctctagatg catgctcgag 60
 cggccgccag tgtgatggat atctgcagaa ttcgcccttt gagcgccgc ccgggcaggt 120
 acgccccggg cagacatggc gacattgaca gtggtccagc cgctcaccct ggacagagat 180
 gttgcaagag caattgaatt actggaaaaa ctacaggaat ctggagaagt acgttcacta 240
 attatctaca aggacaaaat cagttgtatt tacaaaactc tacttcagtg tttgttttag 300
 tttttttttt actgaaactt gtttttgtga atactctgtg cttagaatta aatatcactt 360
 tcttatgaac aacataactt cttcagattg tgtatatgaa aacattagca agtcttggtt 420
 tttctatgaa gcaaacacaa ttggtgacaa aggttggtcaa tcatttcttc aaaattataa 480
 tgcagttcta atggtcagca tattttgata ttaaatttaa agatcacctc tctgcatttg 540
 tttttaaatt atgctaatac accacacatt atgttggtat gttttggtct gtcctcggcc 600
 gcgaccacgc ttanggcgaa tccagcaca ctggcgggcc gttactagtg gatccgagct 660
 cggccaagc tggcgtaatc atggtcatag ctggttctctg tgtgaaatgg tatccgttac 720
 aattcccaca catacgan 738

<210> 313
 <211> 720
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(720)
 <223> n = A,T,C or G

<400> 313
 gnnttncaan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
 cagaattcgc cttttgagcg gccgcccggg caggtacgcg gggggcagac atggcgacat 120
 tgacagtggg ccagccgctc accctggaca gagatgttgc aagagcaatt gaattactgg 180
 aaaaactaca ggaatctgga gaagtacgtt cactaattat ctacaaggac aaaatcagtt 240
 gtattttaca aactctactt cagtgtttgt tttagttttt tttttactga aacttgtttt 300
 tgtgaatact ctgtgcttag aattaaatat cactttctta tgaacaacat aacttcttca 360
 gattgtgtat atgaaaacat tagcaagtct tgttttttct atgaagcaaa cacaattggg 420
 gacaaagggt gtcaatcatt tcttcaaaat tataatgcag ttctaattgg cagcatattt 480
 tgatattaaa tttaaagatc acctctctgc atttggtttt aaattatgct aatacaccac 540
 acattatggt ggtatgtttt gntctgtacc tcggccgcga ccacgctaan ggcgaattca 600
 ncacactggc ngncgttact agtggatcc agctcggacc aaacttggcg taatcatnng 660
 catagctggg tcctgtgtga aaatgggtatc cgttacaatt tcacacacat acgagccgga 720

<210> 314
 <211> 740
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(740)
 <223> n = A,T,C or G

<400> 314
 gnnnttnaa gnctacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
 cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggt 120
 cttttttttt tttttttttt ttagtgcttt ctactttatt aaacatcaaa gcccaaata 180
 atgttccttg tggaggagga cttaaggaca ctaggggagg agaaaggagc acctgggaag 240
 agaatcacac cacagagacc aatcttcaca aaaagggtcc aatattgatt tctagggagg 300
 agcagggcat ggtcagctca aatttggtga taacgtcagg atgaaggacc ccaagcttcc 360


```

cgacgctttg acccctggca aagatctctg cacatcgccc ggggaagaaa gcaggccctt 420
ctgatgcttt gatcacatat ccccccttgt cttcaccagg aggcacatcg agcaactgca 480
taattctgtc cagcagccca tgaatgatct caaaccagg attcttgntg taataaacag 540
cactgagatg tctgtagttt tttgcaccta catctgnatt agaattcttt attacaatgt 600
cagagatttc aaacagtttc agtggaagg gcatcttacg attgctgcta tggttccagg 660
angccaggaa gaagggtagt gcgtgccacc tgaaattcac tgggttagga tacttatgtg 720
gactggcttt gttgcaaaan

```

```

<210> 315
<211> 722
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1) ... (722)
<223> n = A,T,C or G

```

```

<400> 315
gnnnnnnnnn nnnnnnnntn atgctgctcg agcgcccgcc agtgtgatgc atatctgcag 60
aatcgcacct tagcgtgggc gcggccgagg tacttttttt tttttttttt ttttagtgct 120
ttctacttta ttaaacaatca aagcccaaat agatgttccc tgtggaggag gacttaagga 180
cactagggga ggagaaagg acacctggga agagaatcac accacagaga ccaatcttca 240
caaaaagggt ccaatattga tttctagggg gagcaggggc atggctcagct caaatttggt 300
gataacgtca ggatgaagga ccccaagctt cccgacgctt tgacccttg caaagatctc 360
tgcacatcgc ccggggaaga aagcaggccc ttctgatgct ttgatcacat atccccctt 420
gtcttcacca ggaggcacat cgagcaactg cataattctg tccagcagcc catgaatgat 480
ctcaaaccca ggattcttgt tgtaataaac agcactgaga tgtctgtagt ttttgcacc 540
tacatctgna ttagaatctt ttattacaat gtcatgagatt tcaaacagtt tcagtggaaa 600
ggggcatctt acgatttgct gctatggnc tcatgaggnc angaaaaagg gtantgcntg 660
cccctgaaat tcanctgggt taggattacc tatgtggact ggctttgntg caaaaaaant 720
cn

```

```

<210> 316
<211> 753
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1) ... (753)
<223> n = A,T,C or G

```

```

<400> 316
gnnnnnntna nagtnnnnac gactcactat aggggcgaac nctctncatg catgctcnan 60
cggnncnnan ngtgatggat atntgctgan ttccccccta cctntngentn ggccgaggcg 120
cagntcccac gtntngctcc nactnccnn accgcagggg cncngacncn gaccngngnn 180
ncnnngngag tnccncagca ctacttggga nggctanagg gaagnttga aataaaattc 240
caaannttgg agtaaaagca atncangcgn ngattatata tgntnnccct ttctgacacn 300
ncctagagcg tagggggaac atgngtntat ctgtgggana tnaacaagat ggagtcctaa 360
agactttaac aaagntattt cttaannatc cncatcaatn nanaatncat tattcatatn 420
tactntatgc tgnnagttag tatntatgct ngtcctattt aaacttnga gaanaagtgg 480
tntcccttga tacattnaga aatatggggg ctatcttgnt ncattgtggg ggtggggcan 540
aagganaatn aatgcangat gaccctgttg aangaatctt aacatggcca acanggggac 600
ngtttacagt cgattaccag gaaangcaag ccttgggggt tctactgcng gtgggggctg 660
tcatgaactt naaaatccan agnctatacc aggaaaaagt gttangaccc aattgaaaang 720
ctntccaccc tttctttttn tttgttcng cnc

```

```

<210> 317
<211> 893
<212> DNA
<213> Homo Sapien

```

<220>
<221> misc_feature
<222> (1)...(893)
<223> n = A,T,C or G

<400> 317
gtgnntntn cnaaatggnc cntttnaatg cctncctega gcgggccgcc agtgtgatgg 60
atntntaatt cgncccttagc gtgggtcgcg cggnggtacn aangaaataa aantnacagt 120
ntcaaagaac caaantaagt cggacacaaa cccctgtcac cannagagtc ccatanacat 180
aannnggntg ntgtcaagna ggattnaaat taactttaac aacnttntat ataattgtac 240
attccccaat taataaagga nagttcacat atacanctaa ntgntaattg tggaaanaag 300
ggtgaaantn tgcatannta atannaaana atgctgaang cttttncata nnattnnctt 360
aaaaatncac ttncnatgca gcantangtn tacatgctta atntatcntg cnagtgattn 420
ntatgcttgt cctacatgac ntaccttgaa caactggnac tncccgatt cactactgaaa 480
tatggggncg ntaantatnt tgggancggn annacntgaa tcctcaaagg atannnnntn 540
tcagntgga tgaaccnat nattnaaang gatatnntna accatnggan cgaatgnncg 600
nngntctttt tcaatnntnc gngaagntnc cnntnnata ncccngggc cncattgngg 660
ggnntatntn ncaatcaann ccnngagntg tntnntcnt ctnaccgc ataacctttt 720
gccatagga acctntttt aacctttt gnttatnggg aaanaannnn nnttttaaat 780
tcnccaaat ngggaaaaa aacctttt actctaaaaa nttanccnta gacctantn 840
tngngncata tttgntaaac nctatggnc ctnagnggg gnnctgggnc nnc 893

<210> 318
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 318
gnnnngattg tatacgactc actatagggc gaattggggc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgccctttc gagcgccgc ccgggcaggt 120
acctcattag taattgtttt gttgtttcat ttttttctaa tgtctccct ctaccagctc 180
acctgagata acagaatgaa aatggaagga cagccagatt tctcctttgc tctctgtca 240
ttctctctga agtctaggtt acccattttg gggaccatt ataggcaata aacacagttc 300
ccaaagcatt tggacagttt cttgttgtgt tttagaatgg ttttccttt tcttagcctt 360
ttcctgcaaa aggtcactc agtcccttgc ttgtcagtg gactgggctc cccagggcct 420
aggctgcctt cttttccatg tcccacccat gagccctcca ctggacagct cagtaagcct 480
ggcccttcat tctgcgctgt gttcttctc tgtgaaaaa caatacctct tacctcctct 540
gcatgcaaa attctcaagg attgtcagac ttcaaagcga acagcagaac caccagaagg 600
tcctataaat gcagtagtga ccttctcaag ctgtcanggc tttaaataagg atttgggatt 660
taatgctatg tatttttaaa ggaaagaaat aagagtgtct agttttaaaa atgcatgtct 720
tttaccatt canaatctgg cccc 744

<210> 319
<211> 720
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(720)
<223> n = A,T,C or G

<400> 319
gngtttaaac cttcttanng ctgctcgagc ggccgccagt gtgatggata tctgcagaat 60
tcgccctttc gagcgccgc ccgggcaggt acctcattag taattgtttt gttgtttcat 120
ttttttctaa tgtctccct ctaccagctc acctgagata acagaatgaa aatggaagga 180

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|-----|
| cagccagatt | tctcctttgc | tctctgctca | ttctctctga | agtctaggtt | acccattttg | 240 |
| gggacccatt | ataggcaata | aacacagttc | ccaaagcatt | tggacagttt | cttgttgtgt | 300 |
| tttagaatgg | ttttcctttt | tcttagcctt | ttcctgcaaa | aggctcactc | agtcctctgc | 360 |
| ttgctcagtg | gactgggctc | cccagggcct | aggctgcctt | cttttccatg | ttccacccat | 420 |
| gagccctcca | ctggacagct | cagtaagcct | ggcccttcat | tctgcgctgt | gttcttcctc | 480 |
| tgtgaaaatc | caatacctct | tacctcctct | gcatgcaaag | attctcaagg | attgtcagac | 540 |
| ttcaaacgta | acagcagaac | caccagaagg | tcctataaat | gcagtagtga | ccttctcaag | 600 |
| ctgtcanggc | tttaaatagg | at ttgggatt | taatgctatg | tatttttaaa | ggaaaagaaat | 660 |
| agagttgcta | gttttaaaaa | tgcattgtctt | ttaaccaatt | cagaatctgg | ccccnaactt | 720 |

<210> 320

<211> 694

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(694)

<223> n = A,T,C or G

<400> 320

| | | | | | | |
|------------|-------------|------------|-------------|------------|------------|-----|
| atgctcgagc | ggncggcant | gtgatggatn | tctgcagaat | tcgccctttc | gagcggccgc | 60 |
| ccgggcaggt | actattccgg | atatacaaga | tcactgggag | atggtgatga | tggagacaca | 120 |
| gtgacagatt | tcattggccca | agagcgagaa | agaggcntta | ctattcaatc | agctgctgtt | 180 |
| acatttgatt | ggaaagggtta | tagagtcaat | ctaattgata | caccaggtca | tgtggacttt | 240 |
| accttgagg | ttgagcggtg | cctaagagtg | ttggatgggtg | cantggctgt | atttgatgcc | 300 |
| tctgctggtg | tagaggccca | gactntcaca | gtatggaggc | aagctgataa | acacaatata | 360 |
| cctcgaatct | gttttttaaa | caagatggac | aaaactggag | caagctttaa | gtatgcagtt | 420 |
| gaaagcatca | gagagaagtt | aaaggcaaa | cctttgcttt | tacagttacc | aattggtgaa | 480 |
| gccccaaact | tcaaaggagt | gggtgatgta | gtaatgaang | aaaaacttct | ttgggaattg | 540 |
| caattcaana | tgatggaaaa | gactttgaga | gaaagcccct | cttggaatg | aatgatcctg | 600 |
| aattgctgaa | ggaaacaact | gaacaaggaa | tgcccttaatt | gaacaaagtt | gcagatttgg | 660 |
| atgatgaatt | tgctgacttg | gttttaagaa | gaat | | | 694 |

<210> 321

<211> 781

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(781)

<223> n = A,T,C or G

<400> 321

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|-----|
| gngttnacna | ntgggccctc | tngatgctgc | tcgagcggcc | gncagtgtga | tggatntctg | 60 |
| cagaatncgc | cctncggggc | gccgnccggg | caggtactat | nccggatata | caagatcact | 120 |
| gggagatggt | gatgatggag | acncagnac | agatttcatg | gccccagagc | gagaaagagg | 180 |
| cnttactatn | caatcagctg | ctgttacatt | cgattggaaa | gggttatngag | tcaatctaata | 240 |
| tgatncacca | ngtnatgtgg | actttacett | ggaggttgag | cggtgcctaa | nagtgttggga | 300 |
| tggtgcanng | gctgtatttg | atgcctctgc | tggtgtagag | gcccagactc | tcacagtatg | 360 |
| gatgcaagct | gataaacaca | atatacctng | aatctgtgtt | ttaaacaaga | tggacaaaac | 420 |
| tggagcaagc | tttaaagtnt | gcagttgaaa | gcatcagaga | gangttnaag | gcanagcctt | 480 |
| tgctttttaca | gtttcccaat | tgggtgaaac | ccaaaacttt | tcaaaggagg | ttggttggat | 540 |
| tgaagtgaat | gaaaggaaaa | acttctttgg | gaaantggca | atttcaanat | gattggaaaa | 600 |
| ngacttttgg | gagaaaaagcc | ccttcttggg | aaaatngaaa | tgatncctga | aatttgcngt | 660 |
| aaanngaaaa | cnaacntgna | atccaangga | attncccttt | aanttggaac | aaaggnttgc | 720 |
| naanttttng | attgaatnga | at ttgncnga | cntttnggtt | ttangaaaga | aattaaagng | 780 |
| | | | | | | 781 |

<210> 322

<211> 744

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 322
gnnntganag tatcgactca ctatagggcg aattggggccc tctagatgca tgctcgagcg 60
gccccccagt gtgatggata tctgcagaat tcgcccttcc gagcggccgc ccgggcagggt 120
acgcggggac tgggtttttc tccttttgta gccttttctc ttagtctcct cttcccgggtg 180
gttggtaaaa agaggtgaat tgacagccta tggtgaagac actgtgcttt tctcaagaag 240
gacatccaaa cagcaagtct acttctttct ctttaacgat gtgtcatta tcaccaagaa 300
gaagagtga gaaagttaca acgtcaatga ttattcctta agagatcagc tattggtgga 360
atcttgtagc aatgaagagc ttaattcttc tccagggaag aacagctcca caatgctcta 420
ttcaagacag agctctgcca gtcacctctt tactctgaca gtccttagta accacgcgaa 480
tgagaaagt gagatgctac taggagctga gacgcagagc gagcgagccc gctggataac 540
tgccctggga cacagcagcg ggaagccgcc tgcagaccga acctnactga cccagggtgga 600
aatcgttagg tcatttactg ctaagcagcc agatgaactc ttctgcagc ggctgacgtc 660
gtcctcatct atcaacgtgt cagcgatggc tggatgaag gggaacgact tcgagatgga 720
gaaagaagnt ggggttcctat ggaa 744

<210> 323
<211> 723
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(723)
<223> n = A,T,C or G

<400> 323
gtgtttcaan cggtcctcta gatgctgctc gagcggccgc cagtgtgatg gatattctgca 60
gaattcgccc ttctcgagcg ccgcccgggc aggtacgcgg ggactgggtt ttctccttt 120
tgtagccttt tccttttagtc tcctcttccc ggtgggttgg aaaaagagggt gaattgacag 180
cctatgttga agacactgtg cttttctcaa gaaggacatc caaacagcaa gtctacttct 240
ttctctttta cgatgtgctc attatcacca agaagaagag tgaagaaagt tacaacgtca 300
atgattatc cttaagagat cagctattgg tggaaatctg tgacaatgaa gagcttaatt 360
cttctccagg gaagaacagc tccacaatgc tctattcaag acagagctct gccagtcacc 420
tctttactct gacagtcctt agtaaccacg cgaatgagaa agtggagatg ctactaggag 480
ctgagacgca gagcgagcga gcccgctgga taactgccct gggacacagc agcggggaagc 540
cgctgcagac cgaacctcac tgaccaggt ggaaatcggt aggtcattta ctgctaagca 600
gccagatgaa ctcttcctgc angtggctga cgctcgtctc atctatcaac gtgtcancga 660
tgggtggtatg aagggggaacg actacnagat ggagaaagaa gctgggtttcc tatggaatgt 720
gcc 723

<210> 324
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 324
gggnntgaag nncgactca ctatagggcg aattggggccc tctagatgca tgctcgagcg 60
gccccccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
cttgagatct gagcaactgt gttaatgaag taatagcaat ggtccacagt gaaagatgtg 180

```

ttgggggtttg caaaacaagc attccgtcac ctctttaata atgtcacaga cttttttaa 240
agagaggcta tcaagttgta atataatctg tcatgtttta tttagggaagg aaggtaaatt 300
tgtgcttgca cggggatcat tttgtattat ttntgctaata acccagttga agctaaaaag 360
caactatttg aatcctgtga attaatattat aagaatgtta aacagctntg gaaatacatg 420
catcttatga atcatagcct tatttagcaa gatcaatgtt aaagtgttga tatatggcaa 480
gtatttaaca cattcacagt gntagtgtga tttcaactgt gaattgtctt acagtttttt 540
caaacctagt gtntctatgg acacctgtc tgaattgtac ccctcagtca ccaccaaagc 600
attnccacc ctttcaacc ccaatcagac cantgctttc agtgggtattg gaggacttnt 660
atcacagctt catnangtgg tcttggcaca ggcagnctga ctngcttngg aactggtgct 720
tttggaactcc cttcaanngn aatant 746

```

```

<210> 325
<211> 742
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(742)
<223> n = A,T,C or G

```

```

<400> 325
gtgtttcann cgccctcta gatgcatgct cgagcggccc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtaccttg agatctgagc aactgtgtta 120
atgaagtaat agcaatggtc cacagtgaag gatgtgttgg ggtttgcaa acatgcattc 180
cgtcacctct ttaataatgt cacagacttt tttaanagag aggtatcaa gttgtnatat 240
aatctgtcat gtattattta agaagggaagg taaatntgtg ctgacacggg gatcattttg 300
nattattnct gctnataacc agctgaagct nanaancnac tntttgnatc ctgtgantta 360
atncatanna atgttanaca gctntggaaa tccatgcctc ttatgaatca tngccttatt 420
tancangatc aatgttaaa nggttgatat nnggcaagtn tntaacacat tnacantgct 480
agtntgattt caactngaa ttgncttacc gtnttttnaa acctananga atntatngac 540
acctnctctn aatngnnncc ctcaancacc acnaaanctt ttncnccct tncaaccccc 600
natcngaccn cngcattcag tngnaancng aangactttc atcacaactg gncaanatnt 660
nggactttgg cgccatgcnn accctcttgg nctttngaac nnggttgcc tttnggactt 720
tnncctgng ngataaccac cn 742

```

```

<210> 326
<211> 747
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(747)
<223> n = A,T,C or G

```

```

<400> 326
atgntttaag tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgccccttc gagcggccgc cggggcaggt 120
actgtatcat tggcagatgt gacgtcaccg acaaccagag tgaagtggcg gacaaaactg 180
aggattacct gtggctgaag ttgaaccaag tgtgttttga cgacgatggc accagctccc 240
cacaagacag gctcactctc tcacagttcc agaagcagtt gttggaagac tatggcgagt 300
cccactttac ggtgaaccag caacccttcc tctacttcca agtctgttc ctgacagcgc 360
agtgtgaagc agcagttgcc tttcttttcc gcatggagcg gctgcgctgc catgctgtcc 420
atgtagcact ggtgctgttt gagctgaagc tgctttttaa gtcctctgga cagagtgttc 480
aactcctcag ccacgaacct ggtgaccctt ctgcttgcg gcggtgaac ttcgtgcggc 540
tcctcatgct gtacctcggc cngnaccacg ctaagggcga attccagcac actggcggnc 600
gttactagtg gatccgagct cgggtaccaa cttggcgtaa tcatggncat agctgggttc 660
tgtgtgaaat ggtatccgtt acaatttcac acaacatacg agccgggaag catnaagtgt 720
naaacctggg gtgcctnatg agtgacn 747

```

```

<210> 327

```

<211> 724
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(724)
 <223> n = A,T,C or G

<400> 327

| | | | | | | |
|------------|------------|------------|------------|-------------|-------------|-----|
| gtnatgaaac | cnttctntng | ngcatgctcg | agcggccgcc | agtgtgatgg | atatctgcag | 60 |
| aattcgccct | tccgagcggc | cgccccggga | ggtactgtat | cattggcaga | tgtgacgtca | 120 |
| ccgacaacca | gagtgaagtg | gcggacaaaa | ctgaggatta | cctgtggctg | aagttgaacc | 180 |
| aagtgtgttt | tgacgacgat | ggcaccagct | ccccacaaga | caggctcact | ctctcacagt | 240 |
| tccagaagca | gttggttgaa | gactatggcg | agtcccactt | tacgggtgaac | cagcaaccct | 300 |
| tcctctactt | ccaagtcctg | ttcctgacag | cgcagtttga | agcagcagtt | gcctttcttt | 360 |
| tccgcatgga | gcggctgcgc | tgccatgctg | tccatgtagc | actgggtgctg | tttgagctga | 420 |
| ajctgctttt | aaagtcctct | ggacagagtg | ctcagctcct | cagccacgag | cctgggtgacc | 480 |
| ctccttgctt | gcggcggctg | aacttcgtgc | ggctcctcat | gctgtacctc | ggcgcgcgacc | 540 |
| acgctaaggg | cgaattccag | cacactggcg | gccgttacta | gtggatccga | gctcgggtacc | 600 |
| aagcttgggc | taatcatggt | catagctgtt | tcctgtgtga | aattgtatcc | gctcacaatt | 660 |
| ncacacaaca | tacgagccgg | aagcataaag | tgtaaaacct | gggggtgccta | atgagtgaac | 720 |
| taan | | | | | | 724 |

<210> 328
 <211> 747
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(747)
 <223> n = A,T,C or G

<400> 328

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| tgnntgttag | atacgactca | ctatagggcg | aattggggccc | tctagatgca | tgctcgagcg | 60 |
| gcccgccagt | gtgatggata | tctgcagaat | tcgcccttag | cgtggtcgcg | gccgaggtac | 120 |
| tttttttttt | ttttttaaag | acagagtctt | gctctgtcac | ccaggctgga | gtgcagtggc | 180 |
| acgatctcgg | ctcactgcaa | gctctgcctc | ccgggttcac | gccattctcc | tgccctcagcc | 240 |
| tcccagtag | ctgggactac | aggtgcccgc | caccatgccc | ggctgatttc | tttttgtatt | 300 |
| tttagtagag | acggagtttc | accgtgttag | ccaggatggt | ctcgatctcc | tgacctcgtg | 360 |
| atccgcccgc | cttggcctcc | aaagtgcctg | gattacaggt | gtgagctacc | gcgcccggcc | 420 |
| tattatcttg | tactttctaa | ctgagccctc | tattttcttt | attttaataa | tatttctccc | 480 |
| cacttgagaa | tcacttgtaa | gttcttggtg | ggaattcagt | tgggcaatga | taacttttat | 540 |
| gggcaaaaac | attctattat | agtgaacaaa | tgaaaataac | agcgtatttt | caatattttc | 600 |
| ttattcctta | aattccactc | ttttaacact | atgcttaacc | acttaatgtg | atgaaatatt | 660 |
| cctaaaagtt | aaatgactat | taaagcatat | attggtgcat | gnatatatta | aagtaccgga | 720 |
| tactctaaat | aaaaatccac | tggtccn | | | | 747 |

<210> 329
 <211> 725
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(725)
 <223> n = A,T,C or G

<400> 329

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|-----|
| gcgttttcaan | tgggcccctct | ngngcatgct | cgagcggccg | ccagtgtgat | ggatatctgc | 60 |
| agaattcgcc | cttagcgtgg | tcgcggccga | ggtacttttt | tttttttttt | taaagacaga | 120 |

```
gtcttgctct gtcacccagg ctggagtgca gtggcacgat ctcggtcac tgcaagctct 180
gcctcccggg ttcacgccat tctcctgcct cagcctccc agtagctggg actacagggtg 240
cccgccacca tgcccggctg atttcttttt gtatttttag tagagacgga gtttcaccgt 300
gttagccagg atggtctcga tctcctgacc tcgtgatccg cccgccttg cctccaaagt 360
gctgggatta caggtgtgag ctaccgcgcc cggcctatta tcttgactt tctaactgag 420
ccctctatatt tctttatatt aataatattt ctcccactt gagaatcact tgtagttct 480
tggtaggaat tcagttgggc aatgataact tttatgggca aaaacattct attatagtga 540
acaaatgaaa ataacagcgt attttcaata ttttcttatt ccttaaatc cactctttta 600
acactatgct taaccactta atgtgatgaa atattcctaa aagttaaatg actattaaag 660
catatatggg tgcattgtata tattaagtag cccgatctct naataaaaaat ccactggtag 720
agata 725
```

```
<210> 330
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G
```

```
<400> 330
gmnntganag atacgactca ctatagggcg aattggggccc tctagatgca tgctcgagcg 60
gcccgccagt gtgatggata tctgcagaat tcgcccttag cgtggctcgcg gccgaggtag 120
tttttttttt tttttttttt tttttttttt ggaagttaa ttactcaca gttcaacatg 180
gctggggagg cctcaggaaa tttaacaatta taacagaagg caaaggggaa gccagatacc 240
ttcttcacaa ggtggcagga aggagaagag ccgagagaag gcggaagaat cccttataaa 300
accatcagat ctctgagaaa ctacttgct atcaggagaa cagcatgggg gaaccgcccc 360
caggattcaa tgacctnca cttggtctct ccttgacacg tgaggattat ggggattaca 420
attccagatg agatttgggt ggggacacaa agccaaacca tatcaactgt gactaccttg 480
ggtaagggcc atccaggcag aggcaggggg aacattctgg gcaaaggcct tggggcaggg 540
gcctgggtatg ttcagatagc ancaagtagg ccagantggc cggaggggag taagtgtggg 600
gaggccagtg ganagatgag ggtagggaag ggatggatca gatcatgcag ggccccgggg 660
gccacaggaa ngacctnagc atttactgca agtaangtgg gaaccatcga atgtctaagc 720
naggaggaat ccctgtgact c 741
```

```
<210> 331
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G
```

```
<400> 331
gtnnnnnegan ngggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtactttt tttttttttt tttttttttt 120
ttttttggaa gtttaattta ctacagttc aacatggctg gggaggcctc aggaaattta 180
caattataac agaaggcaaa ggggaagcca gataccttct tcacaagggtg gcaggaagga 240
gaagagccga gagaaggcgg aagaatccct tataaaacca tcagatctcg tgagaactca 300
cttgcctatca ggagaacagc atgggggaac cgccccagg attcaatgac ctccacctgg 360
tctctccctt gacacgtgag gattatgggg attacaattc cagatgagat ttgggtgggg 420
acacaaagcc aaaccatatt aactgtgact accttgggta agggccatcc aggcagaggc 480
agggggaaca ttctgggcaa aggccttggg gcaggggcct ggtatgttca gatagcagca 540
agtaggccag antggccgga ggggagtaag tgtggggagg ccagtggaaa aatganggta 600
gggaaagga tgatcagat catgcaaggc cccgggggcc acangaagga cctnacattt 660
actgcaagta angtgggagc catcgaatgt tctaagcana ngangaatcc ctgngactca 720
ngtgtn 727
```

<210> 332
 <211> 734
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(734)
 <223> n = A,T,C or G

<400> 332
 gnntganagt atacgactca ctatagggcg aattggggccc tctagatgca tgctcgagcg 60
 gcccgccagt gtgatggata tctgcagaat tcgccctttc gageggccgc ccgggcagggt 120
 acccttctcg cttttgccat tagccaagga tagaagctgc agtgggatta attttgatat 180
 aatcttttcaa accagcttca tgtggcttcc cttttctttg ttcaagatga gggccaggag 240
 gggaaacatc acacctgccc taaacctgt tcctggaggt cagcatttga tctgttgcaa 300
 gcccctcttt ctgtcccttc ttctaccct gcctcccatg actttgctcc tcacactttt 360
 ggaaccatgc c'tccggggg ggcccatctc ttctggcctg ccttgtctct gggccacttg 420
 gagtgtgtga taaatcagtc aagctgttga agtctcagga gtctctggta gcctgcagaa 480
 gtaagcctca tcacagagc ctttctcaca aactggagtc ccaaagtga tcagggtttg 540
 ntttttttcc aaccactaag aacccctctg cttttaactc tagaatttgg gcttggacca 600
 gatctaacat cttgaatact ctgccctcta gaccttcacc ttaatggaan gtggatccca 660
 nganggtgta atggacatca agccactcgc ggcagcatgg agctatacta agcatcctta 720
 nggtctgcct ctcn 734

<210> 333
 <211> 710
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> misc_feature
 <222> (1)...(710)
 <223> n = A,T,C or G

<400> 333
 ntggggccctc tngngctgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc 60
 ctttcgagcg gccgcccggg caggtaccct tctcgctttt gccattagcc aaggatagaa 120
 gctgcagtgg tattaatttt gatataatct ttcaaaccag cttcatgtgg cttccctttt 180
 ctttgttcaa gatgagggcc aggaggggaa acatcacacc tgccctaaac cctgttccctg 240
 gaggtcagca tttgatctgt tgcaagcccc tctttctgtc cctcttctct accctgcctc 300
 ccattgacttt gctcctcaca cttttggaac catgccttcc gggggggccc atctcttctg 360
 gccgtccttg tctctgggcc acttggagtg tgtgataaat cagtcaagct gttgaagtct 420
 caggagtctc tggtagcctg cagaagtaag cctcatcatc agagcctttc ctcaaaactg 480
 gagtcccaaa tgtcatcagg ttttgttttt ttttcagcca ctaagaacct ctctgctttt 540
 aactctagaa tttgggcttg gaccagatct aacatcttga atactctgcc ctctagagcc 600
 ttcagcctta atggaagggt ggatccaang anggtgtaat ggaacatcaa gccactcgcg 660
 gcagcatgga gctatactaa gcacccctta nggtctgcct cttcagcatt 710

<210> 334
 <211> 2051
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(2051)
 <223> n = A,T,C or G

<400> 334
 gcccttgccct cagcctaccc agtagctggg gatggccatc cttttataaa tgcaacgtcc 60
 ttcgttccctg ttaagtcatg ggggaggaag gccttttctc tcttcagtct aataatcaac 120

| | | | | | | |
|------------|------------|-------------|-------------|-------------|-------------|------|
| tggtcactat | tcacaatagc | aacatcatgg | gctgaacct | tggtgccatc | aacagatgat | 180 |
| tagattttta | aatgtgcata | tataccatgg | aatacatagc | caaccatcaa | aaataatgaa | 240 |
| atcacatctt | ttgcagcaat | atggatggaa | ctggaagccc | ttatcgtaag | tgaaatgact | 300 |
| cagagacaga | aagtcagaaa | ctgcatgttc | tcatttggaa | actgaaaatc | acacacacat | 360 |
| aaatctaata | aagacatggg | tacttttatt | tcaaaacact | catatgttgc | aaaaaacaca | 420 |
| tagaaaaata | aagtttggtg | ggggtgctga | ctaaacttca | agtcacagac | ttttatgtga | 480 |
| cagattggag | cagggtttgt | tatgcatgta | gagaacccaa | actaatttat | taaacaggat | 540 |
| agaaacaggc | tgtctgggtg | aaatgggtct | gagaaccatc | caattcacct | gtcagatgct | 600 |
| gatagactag | ctcttcagat | gtttttctac | cagttcagag | atgggttaat | gactagtctc | 660 |
| aatggggaaa | aagcaagatg | gattcacaaa | ccaagtaatt | ttaaacaaag | acactttttt | 720 |
| ttttttttgc | aacacaatat | acatcacagt | gaaatgtgta | atccttgcaa | attgcaagtt | 780 |
| gaaagaatta | aattcagagg | aggggagaga | aagagtactc | agtagggact | gagcactaaa | 840 |
| tgcttatttt | aaaagaaatg | taaagagcag | aaagcaatc | aggctaccct | gcctttttgtg | 900 |
| ctggctagta | ctccggctcg | tgtcagcagc | acgtggcatt | gaacattgca | atgtggagcc | 960 |
| caaaccacag | aaaatggggg | gaaattggcc | aactttctat | taacttatgt | tggcaatttt | 1020 |
| gccaccaaca | gtaagctggc | ccttctaata | aaagaaaatt | gaaaggtttc | tcactaaacg | 1080 |
| gaattaagta | gtggagtcaa | gagactccca | ggcctcagcg | tacctcatta | gtaattgttt | 1140 |
| tggtgtt.ca | tttttttcta | atgtctcccc | tctaccagct | cacctgagat | aacagaatga | 1200 |
| aaatggaagg | acagccagat | ttctcctttg | ctctctgtct | attctctctg | aagtctaggt | 1260 |
| tacccttttt | ggggaccat | tataggcaat | aaacacagtt | cccaaagcat | ttggacagtt | 1320 |
| tcttggttg | ttttagaatg | gttttccctt | ttcttagcct | tttcttgcaa | aaggctcact | 1380 |
| cagtcccttg | cttgctcagt | ggactgggct | ccccagggcc | taggctgcct | tcttttccat | 1440 |
| gtcccacca | tgagccctcc | actggacagc | tcagttaagc | tggcccttca | ttctgcgctg | 1500 |
| tgttcttctt | ctgtgaaaat | ccaatacctc | ttacctctct | tgcatgcaaa | gattctcaag | 1560 |
| gattgtcaga | cttcaaactg | aacagcagaa | ccaccagaag | gtcctataaa | tgcatgagtg | 1620 |
| accttctcaa | gctgtcaggt | ctttaaatag | gatttgggat | ttaatgctat | gtatttttaa | 1680 |
| aggaaagaaa | taagagttgc | tagtwtaaaa | aatgcatgtc | ttttagccaa | ttcagaatct | 1740 |
| gcccccaaac | ttttttaaaa | agtcaagaca | gataaagctt | tggggagacg | gaaaaaaaaa | 1800 |
| aaaaaaaaaa | aacaagtacc | tcggccgcga | ccacgcctaag | ggcgaaattcc | agcacactgg | 1860 |
| cggccgttac | tagtgggttc | nanncccggg | acnaancctt | gggggtttta | caagggcnaa | 1920 |
| ancnggttnc | cggggntnaa | aattgtttacc | cgcnaaaaat | tccanaaaaa | natncgaacc | 1980 |
| cggaaancca | taaaantntn | aancccnngn | ggccnaaggg | agngnnnaac | cccnaataaa | 2040 |
| tggnntggnc | c | | | | | 2051 |

<210> 335

<211> 1312

<212> DNA

<213> Homo sapien

<400> 335

| | | | | | | |
|-------------|------------|------------|-------------|------------|-------------|------|
| acctagaaaa | cagaaacttg | agtagacatg | gtaatgacca | gaaaaggcta | tctttatata | 60 |
| ttctttttgc | tacgcttcaa | attcatgtca | cctaaaaagt | gtgaagtgc | caaaaacaaat | 120 |
| ctacttaact | gaaaattatt | ttcaatgaat | gggatgttta | gaactctgtg | agggttttta | 180 |
| aggctttttc | gaatagcaaa | ttctaagtga | gcttttttaa | gttggcaatt | taaactcata | 240 |
| caagaaataa | aaactcacca | gtgtggctgg | gcagaatata | tatattttct | caaatattgt | 300 |
| ttgtttgttt | tttccttgca | ctgtatccat | gggtcccatga | tgaaactggt | atattgtctga | 360 |
| tatatatttt | ggaatatgtg | ggccaacttc | ctttccactc | aacatatgga | ttggtagttt | 420 |
| aaaataattc | ctttctatta | agcaaatgtg | tggctaaggc | acattttaa | agcccatata | 480 |
| accaatgaga | tgacaatgtg | ttaccctcag | agaaagctta | atttttggag | taatcaatta | 540 |
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INTERNATIONAL SEARCH REPORT

Intern. Application No
PCT/US 99/13181

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C07K14/47 C12Q1/68 G01N33/68 C07K16/18
A61K31/70

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | HILLIER, L. ET AL.: "WashU-NCI human EST project: zu71f08.s1 Soares testis NHT Homo sapiens cDNA clone 743463" EMBL DATABASE ENTRY AA609384, 1 October 1997 (1997-10-01), XP002128750 the whole document | 1,2,7-9 |
| A | HILLIER, L. ET AL.: "WashU-NCI human EST project 1997: zv83c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 760228" EMBL DATABASE ENTRY HS1226101; ACCESSION NUMBER AA425141 (VERSION 2), 28 October 1997 (1997-10-28), XP002128751 the whole document | 1,2,7-9 |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

26 January 2000

Date of mailing of the international search report

02.05.2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
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Fax: (+31-70) 340-3016

Authorized officer

ANDRES S.M.

INTERNATIONAL SEARCH REPORT

Internal Application No

PCT/US 99/13181

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A | HILLIER, L. ET AL.: "WashU-NCI human EST project: za83e08.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299174" EMBL DATABASE ENTRY HS287326; ACCESSION NUMBER W05287,8 May 1996 (1996-05-08), XP002128752 the whole document --- | 1,2,7-9 |
| A | WO 98 04689 A (UROCOR INC) 5 February 1998 (1998-02-05) page 4, line 8 -page 5 page 13 -page 52 page 66 -page 85 page 112 -page 122 --- | 1-11 |
| A | HELLER ET AL: "DISCOVERY AND ANALYSIS OF INFLAMMATORY DISEASE-RELATED GENES USING cDNA MICROARRAYS" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 94, March 1997 (1997-03), pages 2150-2155, XP002100125 ISSN: 0027-8424 ----- | |

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/ 13181

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

see FURTHER INFORMATION sheet PCT/ISA/210
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box 3.

Although claims 8 to 11 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Further defect(s) under Article 17(2)(a):

Continuation of Box 3.

Claims Nos.: 3 and 6

Present claims 3 and 6 relate to a nucleic acid sequences defined only by the (arbitrary) name of the clone they originate from. The use of these names in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. It is impossible to relate the clone names as given in claims 3 and 6 with the to be searched polynucleotide defined by SEQ ID 1. Consequently, no search has been carried out for claims 3 and 6 in the context of the first subject as mentioned on the communication pursuant to Art. 17(3)(a) PCT.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: Claims 1-11 (all partially)

A method for diagnosing or treating a prostate disorder by providing a probe, antisense, ribozyme capable of hybridizing to SEQ ID 1 or its complement, or an antibody capable of binding to a polypeptide encoded by SEQ ID 1.

Inventions 2 to 339: Claims 1,2,4,5,7-11 (all partially) and 3,6, 12-15 (all partially and as far as applicable)

As for subject 1. but respectively relating to SEQ IDs 2 to 339 (i.e. subject 2. corresponding to SEQ ID 2, subject 3. corresponding to SEQ ID 3,..., subject 339. corresponding to SEQ ID 339) and when applicable including the polynucleotide, vectors, cells and a composition containing the corresponding polypeptide.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Interna. Application No

PCT/US 99/13181

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| WO 9804689 A | 05-02-1998 | AU 6642996 A | 20-02-1998 |
| | | EP 0951541 A | 27-10-1999 |
| | | US 5882864 A | 16-03-1999 |
| ----- | | | |

